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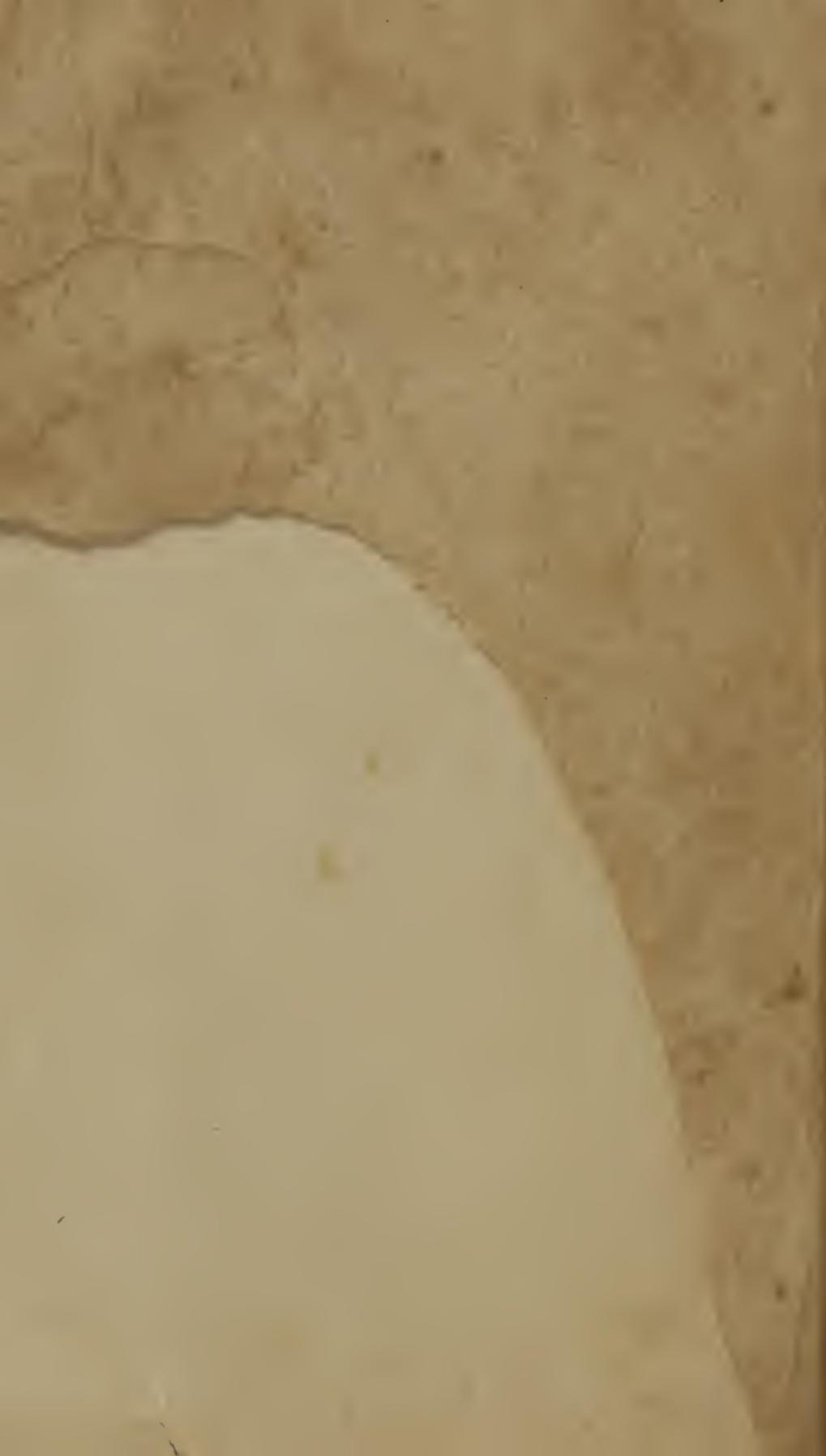
Section *Domestic Medicine*
Carter

Number *378581*

epo 3-10543

Form 113c, W. D., S. G. O.
(Revised June 13, 1936)









THE
BOTANIC PHYSICIAN,
OR
FAMILY MEDICAL ADVISER:
BEING
AN IMPROVED SYSTEM, FOUNDED ON CORRECT
PHYSIOLOGICAL PRINCIPLES.
COMPRISING A BRIEF VIEW
OF
ANATOMY, PHYSIOLOGY, PATHOLOGY, HYGIEINE,
OR ART OF PRESERVING HEALTH:
A MATERIA MEDICA,
EXCLUSIVELY BOTANICAL,
CONTAINING A DESCRIPTION OF MORE THAN TWO HUNDRED AND THIRTY OF THE MOST VALUABLE VEGETABLE REMEDIES:
TO WHICH IS ADDED
A DISPENSATORY,
EMBRACING MORE THAN TWO HUNDRED RECIPES FOR PREPARING AND ADMINISTERING MEDICINE.
THE DISEASES OF THE UNITED STATES,
WITH THEIR SYMPTOMS, CAUSES, CURES, AND MEANS OF PREVENTION.
LIKEWISE,
A TREATISE ON THE DISEASES PECULIAR TO
WOMEN AND CHILDREN.
BY J. E. CARTER.
WRITTEN BY A. H. MATHES.

MADISONVILLE, TEN.
PUBLISHED BY B. PARKER & Co.
1837.

Entered according to an act of Congress, in the year 1837, by
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TO
THE PUBLIC
THIS WORK
IS MOST RESPECTFULLY DEDICATED, WHICH
THEY ARE ENTREATED TO READ BEFORE
THEY JUDGE,

BY
THEIR OBEDIENT SERVANT,
THE AUTHOR.



PREFACE.

EVERY new work, that issues from the press, has, or at least, ought to have, some grounds upon which it can set up its claim to a share of public patronage and approbation. This humble effort to add another item to increase the facilities of the public to acquaint themselves with simple, safe, and efficient means for preserving health and curing disease, is not, we trust, altogether uncalled for, at this time. Although many works on domestic medicine have been written, and some of them by able pens; but little, comparatively speaking, has yet been done to place within the attainment and pre-cuniary resources of the public, a knowledge of the botanic system of practice. A system this, that presents the strongest claims to public confidence, because of its simplicity, its safety, and its unequaled efficiency; for in the hands of skillful practitioners, it has successfully battled death in a thousand shapes, and subdued disease of very stubborn character. Yet this system is comparatively in its infancy, and consequently labors under many imperfections which will gradually be removed as the subject becomes more familiarized. It has succeeded in clearing up and embellishing

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est interest to every son of mortality;—influenced, as he is, by all the conflicting elements around him—by the energies of thought, and the power of sense and sympathy within him, all conspiring to wear out this vital machine—to sap the foundations of this house of clay: while passion tossed by the storms that infest the sea of life, often wreck this frail bark against the rocks of mortality, ere half the voyage is performed; and besides these, numerous diseases lay direct siege to the citadel of life, blockading the avenues of health, and cutting off the supplies of the vital stimulus, and finally forcing an entire surrender of the castle. Man being thus circumstanced, and thus impelled by the combined action of so many agents “to that bourne whence no travller returns,” is it a matter of astonishment, that next to the salvation of his soul, the care of health, and the preservation of life, should call forth his deepest energies to find means to disarm disease of its power. For this purpose, let every ray of light shine upon the subject confessedly obscure—let every improvement and discovery be cast into the balance so long found ‘wanting’—willingly receive the labors of any one from any corner of the globe, that will aid in removing the “avenues of human suffering, and the avenues of death.”

“is end direct-
the reader

INTRODUCTION.

IN presenting the following work to the public it may not be improper to advert to some of the leading objects at which we have aimed, and the views by which we have been governed in its general composition and arrangement.

One leading object has been to simplify the theory and practice of the healing art, so as to adapt it to general use among families; and thus enable them in most cases to become their own physicians. In doing this, the writer has labored that while he adapted his style to the comprehension of the commonest capacity, not to sink beneath the attention of the more learned. We are apprised that a very common prejudice prevails, that the great mass of the human family are incapable of administering to their own, or to each others wants in case of sickness. This opinion has been got up, and is still maintained by the artifice of the profession in clothing the whole "healing art" with the veil of mysticism, and obscuring its sense by learned technicals, which are often applied where they are as unmeaning, as they are uncooth. On this subject, Dr Gunn, a late medical writer of some distinction, says; Professional pride and native cupidity, contrary to the true spirit of justice and christianity, have, in all ages and countries, from sentiments of self interest and want of liberality, delighted in concealing the divine art of healing diseases, under complicated names, and difficult, or unmeaning, technical phrases. Why make a mystery of things that relieve the distresses and sufferings of our fellow beings?" We readily admit that all are not capacitated to become adepts in the medical science, nor to enrich or embellish the science by original observations; yet there are but few who can not learn how to prepare and administer the more simple remedies, in all the common cases of disease. The same earth which yields our food, produces our medicine:—all learn how to prepare their food, which

requires as much art as the preparation of many of the simple and most valuable remedies do, and the preparation of the latter is as easily learned as that of the former. The application of some dashing, unmeaning, foreign, difficult name to a simple medicine, or to a simple, common disease is calculated to strike an unlettered person speechless; and fancying that he is no more able to understand the preparation of the medicine, or the nature of the disease, than he is to comprehend its unintelligible technical name, he is readily induced to give over the study, as one beyond the reach of his intellect. The practice of encumbering the science of medicine with difficult, classic, technicals has hitherto secured to the faculty a privilege, which the Romish priests have lost; —viz: the exercising a despotic sway in controlling all matters that pertained to their art. But the time has arrived when the impartial and intelligent will read and study for themselves; and the daw in borrowed feathers will be stripped of the foreign gaudy plumage with which learning had dressed her. 'Tis true, some of the faculty are as much disturbed about the reformation in medicine, as Demetrius and the craftsmen of Ephesus were at St. Paul's preaching in that city. And the cry is heard through every land, "Great is Diana of the Faculty, whom not only the mercurial-mongers of America, but all the world worship. This effort of the faculty, has produced no small stir about the way, and no means have been left untried to enlist the combined power of ignorance and prejudice against the botanic system. But fortunately the world is not wax enough to take the impression at every stamp the faculty make upon them; although they still manage a great many in the leading strings of prejudice, a majority of the world will be free and independent enough to read for themselves. If men will take the pains to read and study, they will soon be convinced that Heaven has graciously furnished man with the means of curing his own diseases, in all the different countries and climates of which he is an inhabitant; and that a knowledge of the means of curing all

common diseases is not so difficult to obtain as has generally been represented. For says Dr. Gunn, "There is not a day, a month, a year, which does not exhibit to us the surprising cures made by roots, herbs, and simples, found in our kingdom of nature, when all foreign articles have utterly failed; and the day will come when calomel and mercurial medicines will be used no longer." We beg the reader's indulgence while we introduce a few more quotations from the same author, which will go to show the reader, what some of the faculty themselves think of their own system.

"The great body of the people are beginning to find out, that when we take from the learned sciences all their technical and bombastic language, they immediately become plain *common sense* easily to be understood by all ranks of men. I have said, and I now repeat it, that the really valuable materials in medicine, and those which are most powerful in the cure of disease are few and simple, and easily to be procured in all countries: —it is by no means probable, that an all-wise Creator would create man with wants he could not supply, and subject him to diseases for which there were no remedies to be found in nature, and in all the different countries and climates of which he is an inhabitant." Again he says, that "Three fourths of the whole science of physic, as now practiced, and imposed upon the common people, amounts to nothing but fudge and mummery. Mere names are nothing but blinds frequently placed by learned men between the reader and the *realities of things* to conceal the naked poverty and barrenness of the sciences. If the great mass of people knew how much pains were taken by scientific men to throw dust in their eyes by the use of high sounding terms, which mean very little if any thing, the learned professors of science would soon loose much of their mock dignity. Real knowledge consists in understanding both what is *useful*, and what is *hurtful* to mankind; and true wisdom amounts to nothing more than appropriating to our use whatever is *beneficial* and avoiding what-

ever is *injurious*: this is the true distinction between *common sense*, and *nonsense*. The refined fripperies, and hair-drawn theories of science, are of no use whatever. Indeed they never have had much other effect, than to excite a stupid admiration" from the great mass of the community. "I am thus particular," continues the same author, "not because I wish to lower the public opinion of the real value of medical knowledge, but because the time has arrived when the pettifogging *disimulation* which has crept into the practice and science of *law*, and the *quackeries* which have so long disgraced the practice and science of *medicine*, are about to be scattered to the four winds of heaven by the progress of real knowledge, and the general diffusion of useful intelligence." If members of the faculty thus speak and write about the science of medicine as taught among the faculty, what better opinion can they expect others to entertain of it!—or can they reasonably attach censure to us for repeating their sentiments, and presenting them to the attention of the world.

In the compilation of this work, we have introduced those subjects, and adopted that arrangement of the materials, which we thought would embrace all the information that was necessary for a family physician, and offer the greatest facilities for its acquisition. In the brief view of anatomy, which we have taken, the reader will discover that we have presented the subject in a form differing somewhat from most treatises that are extant on the subject, and we hope, it has lost nothing of its interest by the view that has been taken of it. Our principal object in this part of the work, was to present the reader with a brief, comprehensive view of the most important parts of the human system, in which is embraced a consideration of the materials of which the body is composed, both *elementary* and *proximate*; the principal organs of the system and their uses. This synopsis of anatomy was considered sufficiently comprehensive to afford the means of acquiring a general knowledge of the structure of the human system to those whose oppor-

tunities or inclination may not permit them to study any voluminous work on the subject.

On physiology only such subjects are introduced as were deemed important in illustrating and establishing the principles upon which the botanic practice of medicine are based. The principal subjects considered in this department are, the phenomena of life or the living power; the waste of this power; the means by which this waste is supplied, and the living power sustained; the waste of the substance of the organs, and the means by which this waste is supplied; animal heat—the means of its generation in the system; its use in the animal economy, and the means by which it is wasted; and lastly the natural outlet for all morbid matter from the system.

In chapter third we have endeavored to point out the means of preserving health, by showing first that it consists in the due operation of all the functions with ease and regularity; and secondly by considering the influence of aliments, regimen or the regulation of the quantity and quality of food; of the air, clothing, proper cleanliness, exercise, sleep; the excretions, and the proper regulation of the passions.

Chapter fourth on pathology, takes a general view of some of the prominent theories of disease that have been adopted by the faculty; and closes with a short account of our own views on the subject;—the causes of disease, exciting, remote, and proximate.

The second part of the book is occupied by the different botanical remedies that have been employed for the removal of the maladies of man, whether applied externally or administered inwardly;—the method of preparing and administering them; the indication they are designed to answer, and their mode of operation. This department of the work was designedly enlarged to a considerable extent, so that the reader, in whatever climate he may live, may possibly be guided in finding in his own neighborhood, the remedies suited to the cure of his diseases. For some valuable remedies that grow

in one country are not to be found in another, but their place is supplied by something else that is perhaps equally good:—this is the only apology we have to offer for extending the *materia medica* to its present length, if any one should think it needed one.

In part third, the diseases peculiar to our hemisphere, which are common to men, women and children are described, with their causes, means of prevention, and method of treatment.

Part fourth embraces a treatment of the diseases peculiar to women and children.

To your candid inspection reader, the work is now submitted, pardon the errors for some have escaped observation, and crept into the work, that we did not discover until too late to correct them. They are, however, mostly typographical errors, and there are none as we have yet discovered, that materially alter the sense.

It will fortify the mind against the bitterness of censure, blunt the keen edge of sarcasm, and defeat the purposes of malignity to reflect that we have labored though feebly, to serve the cause of humanity, to ease the pangs of disease, and dry up the fountains of suffering and sorrow.

PART I.

OF ANATOMY, PHYSIOLOGY, &c.

CHAPTER I.

OF ANATOMY.

ANATOMY as a science, treats of the structure of the human body, the various organs by which it is constituted and their uses. Practical *Anatomy* is the dissection or dividing of the organized substances to exhibit the structure, situation and uses of the parts. To the operative surgeon, a knowledge of anatomy is an indispensable acquisition, to render him either a safe or skilful operator. Those wishing to practice surgery will find that subject discussed at large in books that professedly treat on that alone. But to a practical physician, in the treatment of disease, the knowledge of anatomy is of little value, unless to encumber the mind with a mass of useless lumber tinsel'd with a show of classic lore, perfectly inapplicable to any of the practical purposes of the healing art. Chesselden one of the most celebrated anatomists of his age, observes that what is most worth knowing is soonest learned, while dividing and describing the parts more than the knolwedge of their uses requires, serves only to perplex the learner with what is useless as it is difficult and uiinviting. A knolwedge of the latin and greek technical names for all the bones, muscles, glands, blood-vessels, nerves, ligaments &c. &c., cannot afford the medical practitioner the least aid in discovering the most suitable and efficient reme-

dies for restoring health; nor confer an understanding of the means of removing a single malady. A knowledge of the best, safest, and most efficient means of affording relief, is the *sine qua non* in the healing art—the charm which confers skill in the application and success in the treatment. The ability to point out the adaptation of a proper remedy to a particular complaint, is the reward of experience, and the patient observation of its effects at the bed side of the sick.

Although we admit that anatomy is an indispensable acquisition to the operative surgeon; yet it is certainly true that the new physiological principles of the *botanic school*, point the practitioner to a safe and successful course of medical treatment, whereby many painful and dangerous surgical operations may be prevented. The botanic practitioner, instead of gathering up instruments of steel to amputate a mortifying arm or leg, successfully applies his powerful antiseptics;—mortification is checked—the limb saved, and the patient is made *whole*, instead of being *maimed* for life. Certainly this is a more rational and correct course of medical treatment, than has hitherto been known or practiced by the medical *faculty*; and we hail its introduction into common use, as the means of saving many limbs, preventing much unnecessary pain, and many premature deaths.

Nothing more is wanted in a work of this kind than a very brief view of the most important parts of the human system, that those whose opportunities or inclination may not permit them to peruse any voluminous work on the subject, may have the means of acquiring some general knowledge of the structure of the human frame.

SECTION I.

MATERIALS OF THE HUMAN BODY.

THE human body is a compound whether we regard the materials of which it is composed, or the organs by which it is constituted. It is formed by the union of a variety of elementary materials, which are wrought into all the various organs which make up the body and perfect its symmetry.

EMPEDOCLES, a celebrated philosopher who flourished about two thousand two hundred years ago, first taught that man as well as all other organized bodies, was composed of the *four elements*, earth, air, fire and water. This doctrine was generally received and maintained by physiologists, until the modern improvements in chemistry had demonstrated, that at least three of those substances, viz: earth, air, and water, were themselves compounds made up of different elementary principles. Modern philosophers have transferred the term elementary, from those natural substances, to which the ancients applied it, to the more simple materials of which they are composed. They deny that any thing can properly be called an element that can be reduced to two or more simple principles.

Modern physiologists, reckon at least twenty elements, which enter into the composition of the human body. Of these eleven are solid; two fluid; three are gaseous; and four inconfinable.

MAGENDIE gives us the following enumeration of the elements; Phosphorus, sulphur, carbon, iron, manganese, potash, lime, soda, salica or sand, and alumnia or pure clay, are the solid elements.

Muriatic acid and water, are the liquid; oxygen, hydrogen, and nitrogen, are the gaseous; and caloric,

light, the electric and magnetic fluids, are the inconfusable elements.

Water and several other materials enumerated here as elements, cannot strictly speaking, be considered as primary elements, according to the present state of chemical discovery.

The great difference observable between the different parts of the human body, take for example the blood which is fluid, and the bones which are hard and solid, does not arise from their formation from different ingredients; but depends entirely upon different portions, under a different mode of combination of the same elementary materials. There are also, what are termed proximate materials; these are substances whose distinguishing properties, bear the nearest resemblance to the matter of the body; and they are formed by the union of different portions of the elementary ingredients differently combined. The proximate materials of animal substances, are, albumen, fibrin, gelatin, mucus, casea, urea, osmazome, and the coloring matter of the blood. There are also others less distinguishable, and less important, such as the acetic, benzoic, lactic, formic, oxalic, and rosatic acids, and the sugar of milk and diabetic urine; picromel, the yellow coloring matter of the bile, &c.

Fibrin is one of the most abundant principles in the animal composition. It constitutes the principal part of the flesh or muscles, and is also found in large quantities in the blood. Fibrin is a white, fibrous substance; it is insipid, inodorous, and insoluble in water. It may be obtained from lean meat washed in successive portions of water until all the coloring matter is removed, and the soluble part dissolved, what remains is fibrin.

Albumen is also found in considerable quantities in both the solids and fluids of the animal body. It forms a large part of the *serum*, or white part of the blood, and of the fluid which serves to lubricate the joints. It also forms a part of the skin, and the membranous coating of the vessels. Albumen may be found almost in a pure

state in the white of an egg, which consists almost entirely of albumen.

Gelatin is the third prevalent animal compound, it exists in considerable quantities in many of the solid parts of the body; but not in any of the healthy fluids. It forms a chief ingredient in the skin, and is found also in the cartilages, tendons, membranes and bones. Boiling water dissolves and separates it from these substances; and on cooling forms glue, if the water be all evaporated from it. Common glue is made by boiling the ears, feet and refuse cuttings of skins of animals in water, and evaporating the fluid so as to form a hard jelly. Gelatin therefore is nothing but glue existing under a different form, combined with other animal matter.

We deem the other proximate principles too unimportant to merit a distinct discription in a work of this kind. They form too small a part in the animal economy to yield the common reader much either of interest or profit.

SECTION II.

ORGANS OF THE HUMAN BODY AND THEIR USES.

Having in the preceding section taken a brief view of the elements, both primary and proximate, which compose the body; in the present section, we turn our attention to the various organs into which these elementary materials are wrought in the formation of the human frame. On this, we must also study brevity, bringing only some of the most important parts of the system in review before the reader.

The most natural general divisions of the human body, are, the head, the trunk or body, the upper and lower extremities. These are covered with the common integuments, viz: the skin, hair and nails. These general divisions are composed of bones, muscles, glands,

ligaments, cartilages, tendons, nerves, blood vessels, absorbents, and the brain and spinal marrow.

The trunk is divided into two cavities by a strong membrane called the midriff or diaphragm;—the upper cavity is called the thorax or chest, and the lower one, abdomen or belly. The heart and lungs, called the thoracic viscera, are contained in the thorax; and the stomach, kidneys, liver, intestines and their various appendages, called abdominal viscera, are contained in the abdomen. A membrane called the mediastinum divides the thorax into two portions, each of which contains one lobe or division of the lungs. The heart is placed in what may be called a third division of the thorax, on the left side.

The abdominal cavity, though not parted into any natural divisions, by some anatomists, has been divided into nine artificial or imaginary regions; and as they are sometimes useful in pointing out the location of the organs, or the seat of disease, we will here describe them.

Imagine two lines parallel with each other, drawn across the abdomen transversly, the one about two inches above the navel, and the other about the same distance below it, we then have the abdomen divided into three grand divisions. Then let us suppose two other perpendicular lines drawn from the upper transverse line downward, one on each side of the navel, about two inches from it, we shall have the two lower divisions divided each into three regions. The upper division also includes three regions viz: the central portion which is between the ends of the false ribs, termed the epigastric region, & on each side of it are the right & left hypochondriac regions. The centre of the middle division is styled the umbilical region, and on the right and left of it, are the right and left lumbar regions. The lower general division contains in the middle the hypogastric region, and on each side is the right and left iliac regions.

“These different regions are generally occupied by the abdominal viscera in the following manner; the stomach occupies the principal part of the epigastric region, and

a considerable portion of the left hypochondriac. The liver fills nearly the whole of the right hypochondriac region and extends through the upper part of the epigastric region into the left hypochondriac. The spleen or milt is also situated in the left hypochondriac region. That portion of the intestinal canal which is composed of the small intestines is generally found in the umbilical, the hypochondric, and the iliac regions. The kidneys are situated in the back part of the lumbar regions."

We shall now proceed to take a concise view of the uses of some of the principal organs, and then dismiss the subject of anatomy.

The BONES may properly be considered as the braces of the living frame; they give shape, stature and firmness to the body; they protect from external injury those sensitive, vital parts which otherwise would be constantly exposed to fatal injuries by the least violence; as the brain, heart, &c.—They also serve for the levers of the body upon which the muscles act, thereby producing motion and exerting power. The number of bones in the human body is estimated at two hundred and forty-eight. Of these sixty-three are in the head; fifty-three in the trunk; sixty-eight in the upper extremities or arms; and sixty-four in the lower extremities. This estimation includes the four *sesamoid* bones in the thumbs, and the four *sesamoid* bones in the great toes, which are not always found.

The BRAIN is situated in the upper cavity of the head. The spinal marrow is only an elongation or continuation of the substance of the brain through the cavity of the spine or back bone. That part of the brain which lies in the back part of the cavity of the head, is called cerebellum or little brain, to distinguish it from the upper and larger portion of the same organ. The brain receives all impressions made upon any of the organs of sense; it is the seat of sensation, the tablet where all the images of perception are drawn;—in short it is the grand work-shop of the mind, where all impressions made upon the organs of sense, are manufactured into ideas. But in what

manner the brain performs this, or what connection it has with the mind is yet, and perhaps ever will be unknown. The deep and varied researches of physiologists, and the elaborate deductions of metaphysicians, have hitherto been unable to reflect any light on this obscure, though interesting subject. The most we know on the subject is, that the mind acquires all its ideas of external, material objects through impressions made by these objects on the organs of sense, and these impression are conveyed to the brain by the nerves, and produce what is called sensation, which is the passive reception of the image of the archetype or patern of the idea upon the brain, and in some unknown manner the perception is conveyed to the mind.

The NERVES all have their origin either from the brain or spinal marrow. Those which issue from the brain are called *cerebral*, and are the organs of sensation;—it is their province to convey impressions to the brain from all parts of the system. Those issuing from the marrow of the spine are termed *spinal*; it is their province to communicate the power of motion to the muscles. The nerves all issue in pairs; it is by means of those that issue from the brain, that we see, hear, taste, smell and feel, or in other words they convey to the brain the impressions received by the five organs of sense, in the act of seeing, hearing, tasting, smelling & feeling. There are usually reckoned forty pair of nerves, of which nine have their origin in the brain, and thirty-one, in the spinal marrow.

The muscles serve to perfect the form and complete the symmetry of the body; but their most important use is to act upon the bones and produce animal motion.

The muscles are all in pairs except nine. There are reckoned one hundred and ninety-eight pair in the human system; this estimation makes the number of muscles four hundred and five.

The muscles are composed of distinct portions of fleshy fibers; and are covered by a thin, delicate membrane, called cellular membrane, which also surrounds every

fiber, though in a less distinguishable form; and connects them to each other, lubricating them by means of the oily substance contained in its cells, and serving as a support to the lymphatic vessels, blood vessels & nerves, which are distributed through the muscles. The muscles are susceptible of contraction and relaxation; and upon this property, their power of producing motion and exerting energy depends.

The GLANDS are composed of blood vessels, nerves and absorbents; and may be regarded as a system of organs dispersed amongst the muscles or contained in the abdomen, designed for the secretion or alteration of some peculiar fluid. They are distinguished according to the nature of their fluid contents, into mucous, sebaceous, lymphatic, lachrymal and salival glands.

The MUCOUS glands are situated in the nose, back part of the mouth, throat, stomach, intestines, bladder, &c.; and secrete (that is separate from the blood) mucus, for the purpose of moistening all the internal surfaces that need moisture. The sebaceous glands are situated in the arm-pits, face, pubes, &c. They secrete an oily substance.

The lymphatic glands are situated in the arm-pits, mesentary, groin &c. These glands are formed by contortions or folds of the lymphatic vessels; and as yet it has not been ascertained that they secrete any fluid. They are supposed to produce some change in the lymph during its passage through them.

The salival glands are situated about the angle of the jaw and root of the tongue. They secrete the substance called saliva or spittle, which the salival ducts discharge into the mouth; and in the act of chewing, this discharge of saliva is much more copious, to facilitate mastication and digestion.

The lachrymal glands are situated above the outer corner of the eyes. They secrete the fluid substance termed tears, which serves to moisten the eyes, and wash out any extraneous matter from them. Grief generally, and joy frequently in some unknown manner, open-

rates on the lachrymal glands so as to produce a copious flow of the lachryma or tears.

The LIVER may be considered as a large gland; it secretes the bile from the blood; and by some anatomists, is supposed to be auxiliary to the lungs in decarboizing the blood. It is situated immediately below the midriff, occupying the right hypochondriac region, and passing through the upper part of the epigastric, it fills a portion of the left hypochondriac region. The bile is a fluid of vast importance, both in promoting the process of digestion, and regulating the action of the intestines. It is supposed to produce a chemical effect upon the alimentary mixture in the duodenum, separating the *chyle* from the *chyme*. By its acridity it excites the motion of the intestines. The bowels are generally fond inactive in those diseases which prevent the secretion of the proper quantity of bile. Its regular secretion also prevents the abundance of acrid mucus from collecting in the intestines, which is apt to produce flux, dysentery &c.

The panchreas is a glandular body, situated immediately below the stomach in the epigastric region. It is of an irregular oblong form, by some compared to a dog's tongue. It resembles the salival glands in color and texture; and appears to be composed of small bodies of a granulated form united to each other by a cellular membrane. The use of the panchreas is to secrete the panchreatic juice, which is discharged into the duodenum to be mixed with the chyle.

This fluid serves to dilute the *viscid*, cystic bile, to mitigate its acrimony, and mix with the food in the duodenum.

It may be remarked in relation to all the glands, that the animal principles which they secrete, are not separated from the blood by mere mechanical filtration, but they are chemically produced. The substances thus produced, do not exist ready formed in the blood; yet their elementary ingredients do exist in that fluid; and the several glands possess the power of selecting from

the general mass, the peculiar elements which make up the substances, they respectively secrete. The secretions are of two kinds: 1st Those which consist of the peculiar animal fluids, as *bile*, *tears*, *saliva*, &c; and 2nd those which form the general materials of the body, for the purpose of nourishing and recruiting the several organs or parts of the system; such as *albumen*, *fibrin*, *gelatin*, &c.; these latter are distinguished by the name of *nutritive secretions*.

The STOMACH is situated in the epigastric region, immediately below the diaphragm. Its most important use is to receive the masticated food, and retain it until the process of digestion is so far completed as to reduce the food to a pulpy, semifluid mass called chyme. Digestion is principally effected by the agency of the gastric juice, a fluid secreted in the stomach, possessing extraordinary solvent powers. Repeated experiments have yielded the most satisfactory testimony, that the solution of the food by the gastric juice is a chemical process decomposing it, and separating it into its elementary principles.

When the process of digestion has so far advanced as to convert the food into chyme, it is poured into the duodenum, where it mixes with the *bile*, and *pancreatic juice*. From this mass, the absorbent vessels called *lacteals* obtain a white opake fluid termed chyle. The *lacteals* are numerous minute vessels, that have their origin on the internal surface of a great part of the intestinal canal.

The chyle contains all the ingredients necessary to the nourishment of the body; and it is conveyed by the *lacteals* into a vessel called the *thoracic duct*; and by that it is discharged into a large vein called the *subclavian vein*, where it soon mixes with the blood, and becomes a part of that fluid. From the blood all the materials are supplied, which support the growth and supply the waste of the system in all its parts whether fluid or solid.

The stomach, including the *œsophagus* or *gullet*, and

intestines is called the alimentary canal; because it is through this tube all our food or aliment must pass, in order to expose its nutritious parts to the action of the absorbents. The grosser parts of the food which cannot be taken up by the absorbent ducts, pass on through the intestines, and are discharged by stool. The contents of the intestines are propelled through them by what is termed the peristaltic motion; and when this suffers any diminution in force or frequency, costiveness of the bowels must ensue as a necessary consequence.

The stomach is one of the most important organs in the animal economy. It may be considered the grand laboratory or chemical workshop of the *living power*, where chemical operations upon our food and drink are regularly performed without effort, toil or study. We must fully appreciate the importance of this organ to the animal economy, when we consider that it prepares our food and drink to yield their nutritious particles; and that it, in connection with the *lacteals*, can with the most unerring accuracy, detect those elementary ingredients contained in our aliment, select and distribute them to the different parts of the system to nourish and recruit it. Any deviation from its regular action, must be attended with a pernicious influence upon our health. And its operation is liable to be disturbed more or less from almost every disease which attacks the body, in consequence of the great number of organs connected with it in the digestive process. From the days of JOHN HUNTER, the stomach has been considered the centre of sympathy in the system. We think there can be no great difficulty to find the reason of this, in the association of so many organs in the performance of one common function, and their mutual dependence upon each other, consequently when one suffers, the other must be more or less affected.

The LUNGS are situated in the thorax. The thorax is lined with a smooth, shining membrane, denominated the *pleura*, which is the seat of, and gives name to the pleurisy. This membrane forms two distinct bags in

the thorax, two sides of which meeting, attach to the inner edge of the spine or back-bone, and reaching from thence to the breast-bone form the partition called the *mediastinum*. The lungs are divided into two portions or lobes, and situated in these two divisions of the thorax, attached to the *trachea* or wind-pipe.

The most important, and perhaps the only function of the lungs, is that of respiration. The more common name for this function, is that of *breathing*, which is simply inhaling the air into the lungs and expelling it from them. An important change is produced in the blood by respiration, which is generally called *decarbonizing* it; this will be more particularly described, when we speak of the circulation of the blood.

The *kidneys* are situated in the lumbar region, one on each side of the spine. They are of a dull red color, and bear a strong resemblance in their form to that of the bean called kidney bean. They are glandular bodies, and it is their province to secrete the urine from the blood. Each kidney receives a large artery, which proceeds immediately from the aorta; and a vein issuing from each kidney, returns the blood to the vena cava, after its superabundance of water has been separated from it. There is no secretion accomplished by any of the glandular structures in the human system, so extensive as this. Its regular performance is essential to a healthy state of the body. Its operation is liable to suffer derangement in two ways. First its secretion may be checked, and a proper quantity of fluid will not be carried off; and secondly, its secretion may be too active, and carry off too much of the fluids; and thus waste away the substance of the body, till death break the attenuated thread of life, close the scene, and end the patients suffering.

The water secreted by the kidneys, is conveyed to the bladder by means of tubes about the size of a goose quill, called the *ureters*. They enter the bladder near its neck; and form for themselves valves, that prevent the water from running back in them, when the bladder

contracts to eject the urine through the urethra, its proper passage.

The *mammæ* or breasts of females, are also regarded as glandular bodies. When full grown, they are of an oval or round form. They are composed of a vast multitude of small ducts or vessels, which secrete the milk from the blood. The milk being designed to answer the purpose of nourishment to the infant, contains every ingredient necessary to support the growth of the body, by supplying every part, both fluids and solids with its proper elementary ingredients. The vessels which secrete the milk, as they approach the nipple fall into each other, and form eight or ten large tubes connected with the most admirable skill, so that if any thing should obstruct one or more of them, the passage of the milk to the nipple, might not be entirely obstructed.

The *heart* is situated in the thorax, nearer the left than right side. It is a strong muscular body, of that class denominated hollow muscles. It is divided into two cavities, which are distinguished by the names of right and left ventricles. Connected with these at the base or broad part, are two other hollow muscles denominated auricles. The heart possesses the power of dilating and contracting which is technically denominated the *systole* and *diastole* motion. By this operation it first receives the venous blood into its cavities, and then forces it into the arteries through every part of the body. This motion continues day and night, asleep or awake, during the whole period of existence. The number of these systole and diastole motions that take place in a minute, is modified or governed by age or by disease. In infancy the number is greatest, being from one hundred and thirty, to one hundred and forty; in manhood, from seventy to eighty; in old age, from fifty-five to sixty-five. Most inflammatory diseases stimulate the muscles of the heart and accelerate its motion. This is the power that rolls the crimson current of life through every channel in the system, with the constancy of a perennial fountain. While the vital power remains,

Heart with untiring assiduity plies the wheels of life, un-fatigued with its ceaseless labor; and is neither lulled into stupidity by the torpor of sleep, nor decoyed into remissness by the enchantments of pleasure.

The heart is generally represented as the seat of our propensities, passions and affections: the fountain from which our good and evil deeds flow. The forms of expression adopted in all languages, whether ancient or modern, classic or rude, sacred or profane, indicate the prevalence of this practice. Even the Scriptures represent the heart as undergoing a radical change in the divine work of regeneration. It must be obvious, that the change wrought in the heart by conversion, cannot be a change of its physical or organic nature; it therefore remains, that the change spoken of, must be of a moral kind, wrought upon the propensities, passions, and affections, which the usual forms of expression, represent as having their seat in the heart. But as a moral renovation can only be wrought in moral qualities, and moral qualities can only attach to mind or spirit subject to moral government, it follows that the term *heart* in these familiar forms of expression is used figuratively, and denotes the soul, to which these moral properties may properly be ascribed.

The BLOOD VESSELS, are flexible, elastic tubes, distinguished by the names of veins and arteries. The arteries receive the blood from the heart, and convey it to every part of the body; the veins convey it from the extremities back to the heart. There are two arteries issuing from the heart, distinguished as the aorta and the pulmonary artery. The latter issues from the right ventricle of the heart, and conveys the blood into the lungs. From the lungs issue four veins called the pulmonary veins, which return the blood to the left auricle, from which it passes into the left ventricle, and the contraction of the heart propels it through the aorta and its numerous branches to every part of the system. The aorta takes its origin from the left ventricle, and sends off numerous large branches to different parts of the body,

which are again subdivided into minute tubes. The origin of the veins corresponds with the term extremities, where with the term extremities proceed from the extremities to the heart, the numerous branches intercepting each other unite, and form tubes larger and larger, until they are all concentrated in two large canals, termed *vena cava*; one of which has its branches from the upper extremities, and is denominated the superior, or descending *vena cava*; the other having its branches from the lower extremities, is termed the inferior, or ascending *vena cava*. These two large veins discharge the blood, thus collected from all parts of the system, into the right *auricle* of the heart, whence it passes into the right *ventricle*, and the contraction of the heart drives it through the pulmonary artery into the lungs, and from the lungs it returns through the pulmonary veins to the heart again: and thus it keeps its ceaseless round, day and night, asleep or awake during the whole period of existence.

The arteries are strong, elastic tubes, susceptible of considerable dilation, and elongation, which takes place when the blood is forced into the aorta, and thus enlarged it readily receives the purple tide; and when the action of the heart ceases, the effort of the artery to return to its usual dimension, keeps a constant motion of the blood along the arteries, during the dilation of the heart to receive another portion of the crimson fluid, which by the contraction of the heart, is again driven into the aorta, and thus the vital tide is kept in motion. The aorta or grand arterial trunk has a valve at its orifice or opening into the heart, which readily admits the passage of the blood from the heart into the artery; but prevents its return from the artery into the heart. Were it not for this valve, the blood would run back into the heart, at every dilation. In many of the veins also, there are valves which readily admit the passage of the blood towards the heart; but prevent it from running towards the extremities of the body.

One of the principle purposes answered by the cir-

culation of the blood, is the distribution of the nutriment to every part of the body. The lacteals abstract from the digested food all its nutricious parts, and convey them into the thoracic duct, whence they are discharged into the left subclavian vein to mingle with the blood; and by its circulation, are carried to every part of the system. The operation by which the nutriment, that supports the growth, and supplies the waste of the body, is separated from the blood, is termed secretion. Secretions are performed by the agency of the glands, which are small tubes collected together in bundles. The glands receive their name from the latin word *glans*, which signifies acorn, from their resemblance to the shape of that fruit.

These secretions are all effected during the passage of the blood through the arteries, and by this means it is deprived of a greater portion of those principles, which are necessary to the carrying on of the animal functions. Thus exhausted, it returns to the heart to be revived. On its way it receives from the thoracic duct a supply of nutriment just before it enters the *right ventricle* of the heart, and is thence driven through the pulmonary artery into the lungs. It circulates through that organ by means of inconceivably numerous vessels of a delicate texture. When it enters the lungs it is of a dark purple color, but when it leaves them its color is a bright red, or a florid hue. This change is produced by the air inhaled into the lungs. While the blood passes through the numerous delicate vessels in the lungs, it absorbs oxygen from the air; and the air abstracts carbon from the blood. When the air is exhaled from the lungs, a great portion of its oxygen has disappeared, and carbon is found in its place. The blood relieved from its superabundance of carbon, and now essentially revived, sets out again, to distribute its fresh supply of nutrition and stimulus, to the different parts of the system.

CHAPTER II.

OF PHYSIOLOGY.

PHYSIOLOGY is that science which inquires into the nature of those phenomena which belong to living beings. We do not intend, in this work, to enter into a formal, scientific discussion of this subject, in the usual method of shading it with classic obscurities, and garnishing it with technical lore. But we shall introduce such subjects as we shall deem useful to illustrate and establish the new physiological principles of the *botanic school*. In connection with this, will be exhibited a comprehensive view of what we esteem, the only correct principles upon which the successful practice of medicine can be based.

Some attention will, occasionally, be bestowed on other subjects, that may be considered remotely or even incidentally, connected with this part of the work. The principles upon which the botanic system of practice is founded, were not formed in the vague regions of speculation; but were drawn from the school of experience, by observing the various modes, operations and phenomena of life under the different aspects of health and disease; and by paying particular attention to the operation and effects of remedies, having the mind unbiased by any favorite theory previously adopted. And hence the most astonishing results have ensued;—the safety and efficacy of the remedies have been tested, not in few cases of mild form; but in thousands of cases of the most hopeless kind;—hundreds of them being given over, and pronounced incurable by the *faculty*. For indeed the founders of the botanic system, had at first only few cases to attend to such as were pronounced incurable; and

thus his remedies evinced their perfect safety and unparalleled efficacy, and urged the new practice into notice, in despite of the obstinacy of ignorance and the blindness of prejudice. The certainty and value of these remedies, are rapidly gaining the confidence of the public, notwithstanding malice has exhausted all the power of falsehood, exaggeration and misrepresentation to keep the system down, and learning has employed all the raillery of wit, all the amplifications of rhetoric and all the force of declamation to bring it into contempt. A system that has intrinsic merit enough to give it an energy sufficient to rise beneath the crush of this mighty lever, need not dread a competition with the old mineral system.—A system framed in the regions of speculation, and fraught with uncertainty and want of efficacy, as is clearly shown by the successive changes its principles have undergone, from the days of *Paracelsus* to the present. Some daring genius, starts the chase in the *wilds* of speculation;—scents up a new theory;—points out the defects of the former system of practice; is followed and admired by numbers,—triumphs his brief day, and then goes the way of all the earth, and his beloved theory, frequently, soon follows. It is succeeded, however, with another built on principles equally uncertain and introduces a practice equally unsuccessful. To conceal the defects of these different systems, *sophistry* was engaged to weave a covert for them; and *learning*, was employed to patch the rents that experience was continually making; and as far as possible, to conceal the whole from common observation by dressing them with technical lore, and classic obscurities. We think the new physiological principles of the *botanic* school, furnish us with the torch of truth kindled by experience, whose beams pierce through sophistry's coat of many colors, and expose at once the weakness and absurdity of the system, however disguised to common eyes, or complicated by art. It is impossible for science invested with the splendid robes of learning, to bend or change the principles of nature to suit a favor-

ite theory, if that theory be founded on assumed principles that are incorrect. When philosophy takes the wrong road, its magic power can lead its votaries farthest from the truth, plung them into the deepest error, and bind them with the strongest delusions. The principles upon which the successful practice of medicine is based, must be studied in the school of experience. In this school Dr. Thomson studied long with nicest observation of the cause of disease, and the effects of remedies, for forty years, on near a million patients, in all varieties of cases and diseases, until his success in discovering remedies has enabled him to battle death in a thousand forms, and conquer disease of the most stubborn character.

SECTION I.

OF LIFE OR THE LIVING POWER.

There are none perhaps who have not observed the phenomena of the living power; but what constitutes vitality or the living power is not so clearly understood. The deepest anatomical, and physiological research, has hitherto, been unable to satisfactorily settle the question, as may be seen by the accumulation of theory upon theory, and the advancement of hypothesis warring against hypothesis, all offered in explanation of this difficult, though interesting subject.

The reader has been informed in the preceding chapter, that each organ in the system is charged with the performance of some office or function, in carrying on the animal economy. The performance of a function implies both an action and the power to act; for as there can be no performance without action, so there can be no action without power to act. All organs therefore, must either possess an inherent power, or it must be imparted to them through some external agency, by which they are enabled to act. This power, from whatever

source derived, is called, the *living power, vitality* or the *power of life*. And when this power ceases to act, the organs fail to perform their respective functions, and the wheels of life no longer move. During its presence there is life; in its absence there is death. The most stupid can distinguish between a living and a dead man, but the most learned cannot explain the intimate nature of that living principle which animates the one, and has forsaken the other.

BAGIVI supposed the *dura mater* to be the life, or the seat of the power of life; HALLER placed it in the medulla; HOFFMANN in the nervous fluid; DARWIN in the sensornim. HIPPOCRATES the Grecian father of medicine, supposed that life was derived from fire or heat; and this was a prevalent opinion among, his successors. DR. THOMSON, of the present day observing the invariable necessity of the presence of heat in a living body, and that in its absence there was death, was led to form the same opinion. TOURTELL has endeavored, by introducing both facts and arguments to prove that *caloric or heat*, is the vital principle which animates the whole living world.

The human system has been compared to a complicated machine, and the operation of the different organs, is like the moving of so many different wheels, all kept in motion by one main spring or moving cause; and that moving cause is the *power of life*. If the power which keeps up organic motion be inherent or self-existing, it cannot be dependent upon any extraneous matter for supplies to keep up vital action. But we find from observation that the vital power is continually dependent upon supplies derived from the air we breathe, and the aliment we receive. If food, drink and air be withheld, instantly do the wheels of life cease to roll, and the crimson tide forgets to flow. This view of life, led the ingenious Dr. Brown to adopt the theory that life was a *forced state*, continually dependent upon power derived from external substances; that the tendency of animals every moment is to dissolution; and that they are kept from it, (not by any power in themselves,) but by *foreign*

powers, and even by these with difficulty, and only for a little while, until disease, accidental injury, or old age weaken or wear out the machine, and then it can move no longer.

With regard to the nature of the living power, or its peculiar mode of operating upon the organs, little is known; and whether it acts as a chemical or mechanical agent, we are not fully prepared to say; nor is it a matter of great consequence, in a medical point of view, to know either its intimate nature, or its peculiar modus operandi. Of one thing, all must be sensible; its continued application is necessary to keep up organic motion, and drive us on through life.

The Hebrew lawgiver, under the guidance of inspiration, forbade the Jews to eat the blood, because it was the life. This declaration of Moses, probably means, that the *life* is *in* the blood; and that the vital power which plies the wheels of life, is imparted by it. This latter idea corresponds with all the facts that observation has been able to collect on the subject. All have noticed that vital action is continually dependent upon a power derived from air and aliment; for if these are withheld life ceases. The nutriment and stimulus obtained from the food and drink received into the stomach, and the air we breathe, are communicated to the blood, and by it, are imparted to the organs; and thus it would be inferred that the *living power* is concentrated in all its force in the blood. This view of the subject agrees with the declaration of the inspired Jewish lawgiver. It is further corroborated by another fact obvious to the most unlettered;—take away the blood, and you destroy life; open an artery and life together with the blood, escapes at the orifice.

Our remarks so far have been confined to the principle of mere vitality, or that power of life which stimulates the organs, and enables them to accomplish the different tasks assigned them in the animal economy. But there is in man a living principle far superior to mere vitality. And the existence of this principle is clearly

evinced by the production of actions, that must spring from a far more noble and efficient power than vitality or mere animal life. Man is capable of performing actions that indicate volition, reason, judgment and design; and must necessarily, be in possession of a moving power, that can choose, reason, judge, design, &c. This living principle, we call the soul or spirit: it is immaterial and consequently immortal; and is not dependent upon any material substance for its existence or its power. Mere vitality is only capable of producing involuntary organic action; i. e. such motions or actions of the organs, as go on regularly without the mind exercising any choice or direction about them. The motion of the heart and lungs, the circulation of the blood, the various secretions and excretions, &c. are of this kind.

But the mind or soul is concerned in the production of all voluntary actions; and in some indefinable manner, can so act upon the bodily organs, as to produce immediate obedience to its volitions. The soul like a lord maintains an absolute dominion over the bodily power. It wills, and the obsequious organs instant obedience yields. Quick as thought the nimble tongue plies its articulate powers to communicate to others, the cogitations, wishes or commands of the soul. It designs, and the docile hands with skillful touch draw the delicate likeness; chase up the expressive marble true to nature; or diligently ply the tools of art, and the implements of husbandry. If business or amusement invite to a different place, the willing feet bear it to the desired spot.

The student of the healing art, however, is only immediately interested in observing the various operations and phenomena, which vitality or animal life exhibits under the different aspects of health and disease.

SECTION II.

WASTE OF THE POWER OF LIFE.

The preceding section shows that the *vital power* is not inherent or self-existent in the human system; but is continually dependent on, and kept up by the stimulus and nutriment derived from the air inhaled into the lungs, and the aliment received into the stomach. The tendency of all animals is to dissolution; and the power which for a while, resists this tendency is derived from foreign substances, that in their natural state bear no resemblance to the living machine.

The toils of business, the fatigue of labor, the anxiety of care, the pangs of distress, the thrill of ecstasy, the depression of disappointment, the gloom of despondency, the rancor of malice, and the corrosion of envy, all tend to undermine the foundations of life, and exhaust its energy. The constancy of organic exertion, is continually wasting the power that gives them motion. Any increased or excited exertion either of the vital organs, or of the muscular motions still more rapidly exhausts the living power.

The use of ardent spirits, which stimulate the heart and arteries into increased exertion without supplying any nutriment to keep up the living power, impairs the tone of the organs; for being lashed into an excited exertion, without any increase of power to sustain that exertion, a waste of its power is the invariable and necessary consequence. Excessive eating or drinking, unnecessary sleep, neglect of proper exercise, inordinate indulgence in sensual pleasures, all enervate the system, either by exhausting the living power or preventing its accumulation. The indulgence of inordinate passion, is usually attended with a diminution of the vital energy; and on some extraordinary occasions has prostrated it entirely. Sudden transports of passion are always deleterious to the living power; and numerous in-

stances are not wanting in which they have instantly
*losed the silver cord, broke the golden bowl, or broke
the pitcher at the fountain, or the wheel at the cistern.*

While treating on the waste of the vital power, by the influence of these common causes, duty binds, truth requires, and humanity urges, that we expose the deleterious influence of some other causes upon the same power. And it is the more imperiously necessary that we notice them, because the *living power*, is subjected to the most lavish and fatal waste of its energy, under the delusive idea, that it will be a means of restoring health or relieving pain. We allude to the practice of bleeding and starving patients, or what amounts to the same thing, imposing upon them great abstinence. It is well known that these items, form an important part of the common treatment of disease, by practitioners of the faculty. We are aware that this practice is in accordance with, and recommended by their theory of practice; but experimental facts can, and ought to overthrow all the theoretical reasoning that has been, or ever will be advanced in defence of a practice so much at war with life. A late respectable writer says, that in a given period, previous to the time he wrote, that more persons had perished under the use of the *lancet*, than had fallen by war, famine and pestilence in the same periods and indeed when we take a correct physiological view of the blood and its use, we cannot esteem the statement as an exaggeration, nor be astonished that a practice so pernicious, would be attended with a result so *murderous*.

In the foregoing section, we have shown that the blood is the medium through which the system receives all its nourishment; and that the organs are constantly dependent upon it for the supply of that stimulus and nutriment which keeps up vital action. The circulation of the blood, is for the purpose of carrying to every part of the system, the portion of nourishment and stimulus necessary to promote the functions of life. "This distribution of nutriment and stimulus, is more necessary

in disease than in health; because disease is the result of a deficiency of the vital power." How pernicious then, must that practice be to the system, already laboring under a deficiency of vital energy, to abridge the very means which are provided to recruit and sustain it!! By diminishing the quantity of the blood in which the whole vital power is concentrated, the whole system, even to the minutest fiber, must suffer a loss of vital energy and a diminution of the nutriment and stimulus that sustains that energy. According to this view of the subject, the practice of bleeding is but lending assistance to disease to accelerate the fatal period; because it wantonly exhausts the power that resists dissolution, and holds the stroke of death in check. The theory which recommends the wanton waste of the very power that battles death and sustains vital action, in order to remove disease, must surely have been begotten by ERROR, and nursed by SOPHISTRY in the wilds of speculation, remote from the observation of those facts that experience daily furnished.

DR. HALL says the immediate effects of the loss of blood, are, syncope or fainting, convulsions, delirium; and in many cases speedy dissolution. He then gives numerous instances of the disastrous effects resulting from the use of the lancet in the most experienced hands, to prove the correctness of his remarks on its fatal effects. The aggregate amount of mischief which has been inflicted by this pernicious practice in the hands of all who have been dabbling with it, is, and must forever remain beyond the reach of human calculation.

The opinion, that nature produces an exuberance of blood, any more than it does of flesh or muscles is as unphilosophical as it is contrary to fact. In a state of health it will not do it; and in disease, there are manifestly, fewer materials from which to produce an exuberance, or even to furnish the necessary supply of the vital fluid to answer the ordinary purposes of life.

It is argued that the propriety of bleeding is indicated by a diseased state of the blood. Suppose we ad-

sit that a part of the diseased blood, will, by bleeding, be abstracted; but will not a part of what is not diseased, be taken away also, and the vital power must suffer a corresponding loss of energy and consequently be less able to struggle against disease.

With practitioners of the *faculty* copious bleeding is the *alpha* and *omega*, in all inflammatory complaints. Let it be granted that the patient experiences a temporary relief from his pain; does he not suffer a serious, and often a fatal diminution of the power that resists inflammation and grapples with death? Hundreds of the disciples of the old school, have witnessed and lamented the debilitating and fatal effects of blood letting; and have made the practice a last resort; and then reluctantly, because their *Materia Medica*, labored under an utter want of efficient remedies to check inflammation or remove the symptoms of mortification in its incipient stage.

With the botanic practitioner, a resort to the pernicious, debilitating and murderous practice of abstracting a part of the life sustaining fluid, is unnecessary, either to check inflammation, resist mortification, or to remove morbid impurities from the blood; because he has much more safe and efficient remedies at hand. His *Materia Medica* abounds with articles that are perfectly safe to the patient, and at the same time possess a power to remove inflammatory and morbid action, that is unequaled by any thing known in the *Materia Medica* of the *faculty*.

With gentlemen of the *faculty*, the practice of starving their patients is very common; and it is as much at war with common sense, as it is debilitating to the body. In some severe cases it is pushed to its utmost limits, even to the confines of starvation. Such a treatment would exhaust the power that sustains vital action in the most healthy and robust constitution. And the regular supply of nutrition can not surely, be less necessary to support the vital power, when grappling with disease, than it is in health! Medical science can boast but little experimental knowledge, and confers its

honorary title, M. D. with accompanying diploma, to no valuable purpose; if it can not teach its votaries, that two enemies can destroy life easier than one; or two leaks would empty a vessel sooner than one! When the impaired living power is already sinking in its struggle with disease, surely the Philosophy of the medical schools, can boast of little wisdom in that prescription, which with holds the very means that nature designed to sustain it. The plan of starving out disease might gain some hold on our confidence, if it were not for this inconvenience; it destroys the very power that enables medicine to conquer disease.

The greater part of the medicines [i. e. *poisons*] upon which physicians of the old school, place their principal dependence in the treatment of disease, exert an agency that is inimical to the laws of animal life; and no doubt, render it improper to take food. But here lies, one of the errors of the system, in administering hostile remedies, that pervert the very order they ought to restore, and weaken the very power they ought to strengthen. Indeed, it would seem from the nature of the remedies they use, that it had never entered their minds that a diseased action could, by salutary medicines, be changed at once into a healthy one; but must first, by unsalutary medicines, be changed into some other unhealthy action, and then that must be corrected and restored to a healthy action by the power of nature! Is it not bad policy then, to make such a wanton waste of nature's powers by bleeding and starving, and then leave it so much to do!! We must confess that we have little partiality for, or confidence in remedies that act on this principle. We want salutary medicines that will exercise a direct influence upon the diseased part and restore a healthy action, without taking a circuitous rout, producing one unhealthy action to combat another; and then leaving nature's exhausted power to battle it out with the last.

Botanical *Materia Medica* furnishes us with salutary efficient remedies that act in harmony with the laws of

animal life; and exert a direct influence upon the diseased part, restoring a healthy action. Nor is the operation of these medicines, so discordant with a healthy state of the digestive functions, as to require the prohibition of the proper quantity of aliment to sustain nature's powers. The desire for food and drink, being the instinctive demand of nature for a supply of those articles which are necessary to sustain the living power, can not be withheld without emaciating the system, and diminishing vital energy. We must be careful however, to distinguish between the morbidly insatiable appetite met with in some complaints, and the too greedy one of convalescents; and in both cases allow only what will be proper to answer the legitimate calls of the living power to sustain its operations.

In conclusion we add, that a resort to a remedy, or a course of treatment, that obviously weakens the living power, ought always to be avoided, when remedies that are equally efficient can be had, which produce no such pernicious effects upon the system. In disease, the system is already laboring under a deficiency of vital energy, and whatever course of treatment, diminishes this power, must be highly injudicious. Although you may not witness at once an entire prostration of nature's powers, yet such a wanton waste of the power that must co-operate with medicine to check and remove disease, is well calculated to bring about a fatal termination of the disorder. And we hesitate not to express our thorough conviction, that this very course of treatment has accelerated the stroke of death in thousands of instances, when the fatality of the case, was ascribed wholly to the obstinacy of the complaint.

SECTION III.

MEANS OF SUSTAINING THE LIVING POWER.

OUR remarks have already anticipated the sources whence the supplies are derived to recruit the wasting power of life; but the subject merits a more minute consideration.

In a former section, we have shown that the living power is concentrated in the blood; and that this fluid immediately imparts the stimulus, and supplies the nutriment, to every part of the system which sustains vital action. Like the stately Amazon and its thousand tributaries, refresh the groves and forests through which they flow; water the towns and villages that line their banks; and make the intersected meadows rejoice with verdure; so this "human river" with a far richer stream, and infinitely more numerous branches, rolls its living current through every part of the body, transfusing life and healthful vigor through the whole.

It must be obvious, that if the blood is constantly depositing its stimulant and nutritious parts throughout the whole system, it must soon become exhausted, unless it receive fresh supplies; for a small leak will empty the largest vessel, without constant recruits equal to the waste. The air we breathe, the food and drink we take are the sources from which the vital fluid derives its constant recruit of stimulus and nutriment. When the blood returns to the heart, it is deprived in a good degree, of those qualities which fit it to sustain vital action. But just before it enters the right *auricle*, it receives a fresh supply of chyle from the thoracic duct, which soon mingles with, and becomes a part of the purple tide. The blood having received this recruit of nutriment, is driven by the motion of the heart through the lungs, before it is permitted to begin a new circulation. In its transit through the lungs, it undergoes an important

change, which is especially requisite to support a second circulation; of this change, we will speak more particularly hereafter. From the lungs the revived blood is returned to the heart, and this living, untiring engine, impels the quickening stream throughout the system, imparting sense to every nerve, and motion to every organ; while it dispenses its nutrimental treasures to every member even the minutest vessel and slenderest fiber. It is exhausted and recruited, as above described, at every revolution it makes.

From the air, the blood derives both a powerful and constantly necessary stimulus. We can bear a deprivation of food, for some time, without destroying life; but a deprivation of air for a few minutes would prove fatal. Experience furnishes every man with the most indubitable testimony, that respiration is an important and momentarily necessary means of sustaining animal life.

As above shown, the blood, in making a complete circulation through the body, passes through the lungs, where it undergoes a change essential to the continuance of life; and this is, in some way, effected by the air we breathe.

Physiologists have indulged much speculation on this subject; and have advanced different hypotheses in explanation of the manner in which this most important function of the living machine is performed. The accumulated testimony of such facts, as have come under the eye of observation, clearly show the continued necessity of this phenomenon; yet the particular manner in which it is produced is not so definitely known.

The most satisfactory hypothesis, however, that has been offered in explanation of this interesting subject, is that the blood, during its passage from the extreme branches of the pulmonary artery, to the corresponding branches of the pulmonary veins, comes in reach of the influence of the air; for the wind pipe divided into the minutest branches, passes through every part of the lungs, terminating every where in air vesicles. This

contact of the blood and air in the organ of respiration, produces a mutual change of properties in both; for the blood absorbs oxygen gas from the air, and the air abstracts from the blood, its useless, morbid parts, supposed to be principally carbon. One thing is certain, when the blood leaves the lungs it is of a florid hue, when it entered that organ, it was of a dark purple color. The presence of carbon gives the blood the dark purple hue it has in the veins; but before it is permitted to enter the aorta or grand arterial trunk, the air inhaled into the lungs, yields its oxygen to the blood, and abstracts its carbon from it. This is what changes the venous, into arterial blood. It is no objection to this hypothesis, to urge that the membrane which forms the blood vessels, intervenes between the air and the blood; for it is proven by experiment that both carbonic acid, and oxygen gases penetrate such membranes with great facility. Enclose a portion of venous blood in a bladder; and notwithstanding the intervention of the membrane between it and the atmosphere, the same change is readily effected. We mention another curious fact as a further illustration of the penetrability of the membranes by the gases. It is found that some gases penetrate them with more facility than others. Take a bladder and fill it partially with one kind of gas, then secure the neck perfectly tight, and expose it in another gas that will penetrate it with greater facility than the one in it will; and the outside gas will penetrate so much faster, than the one inside, that the bladder will become completely inflated, and if not very strong will burst.

Every portion of air inhaled into the lungs, is deprived of the greater part of its oxygen; and its place is supplied by carbonic acid gas. And we think the foregoing remarks, satisfactorily show that the oxygen lost by the air we breathe, is absorbed by the blood; and the carbonic acid and other impurities, with which it is charged when exhaled from the lungs, were abstracted from the blood.

Respiration appears to have a direct influence upon

the circulation, and the circulation upon respiration; for if one be accelerated, the other will be also. Active exercises, such as running, jumping &c., will increase the rapidity of the pulse, and a corresponding increase in the respiration will be found necessary. The reason of this is obvious; for when the motion of the blood through the system, is accelerated, it could not be supplied with its proper portion of oxygen, without a corresponding increase of the respiration.

So important is air to the living machine, that it cannot move without it. Deprive a man of air, and the wheels of life will stop as instantly as the wheels of a watch would, when the main spring is broken. Anatomists tell us that when a child first comes into the world, the heart does not beat nor the arteries vibrate. It is like a watch sound in all its parts remaining at rest until wound up. As soon as the air expands the lungs, and changes the venous into arterial blood, it imparts a stimulus to the animal machine, "the heart acquires its action, the brain its energy, the nerves their sensibility, and the other subordinate springs of life presently resume their respective functions."

From this we may learn the fact, that air is an essential means of sustaining life. It should also contain oxygen; for air deprived of its oxygen can not sustain vital action. This is the reason that some persons become weak or debilitated, others sicken, and others faint, in close crowded rooms. Tight rooms do not admit a sufficiency of fresh air to answer the purpose of respiration, when they are crowded; for a portion of the oxygen of the air in the room being destroyed every time it is taken into the lungs, the quantity of oxygen will soon be insufficient to support life, unless there be constant supplies of fresh air admitted into the room. When fresh air is freely admitted, there is little danger of being annoyed with the air exhaled from the lungs, for being deprived of its oxygen it is lighter than the other air, and consequently it will rise out of our reach as soon as it escapes from the mouth. Another reason

why it rises above us is, that when exhaled, it is heated enough to rarify it; and thus it would be rendered lighter than an equal column of the surrounding atmosphere, and it readily ascends until it meets a column of air of its own specific gravity. This fact may be easily tested by making two openings in a room that is perfectly close in every other place. Let one of these openings be at the upper part of the room, and the other in the lower. Then let the room be filled with people, and you will find a constant stream of fresh air rushing in at the lower opening, and the rarified, vitiated air escaping at the upper one.

Air deprived of its oxygen, or charged with noxious vapors is incapable of sustaining the vital power, as it can not afford the necessary supply of stimulus to the blood; and as it also contaminates the fluids both by imparting noxious impurities to them, and by not abstracting the carbon from the blood or any other useless or extraneous matter, with which it may become charged during its revolution through the body.

SECTION IV.

WASTE OF THE SUBSTANCE OF THE ORGANS, AND THE MEANS OF SUPPLYING THAT WASTE.

In the present section, we will offer some remarks upon the means by which the materials that compose the organs are wasted, or carried off from the body. This waste of the substance of the body, renders daily supplies of fresh materials necessary.

We have shown in the section on *life* or the *living power*, that the action of the different organs, like so many wheels in a complicated machine, is produced and kept up by the living principal. This animated, organic machine is composed of matter as well as an inani-

waste one is, and like it, must wear out by continual use; for wherever there is motion there must be friction, and wherever there is friction there must be attrition or wearing, and that which wears away must sustain a loss or waste of its substance, consequently must need repair.

There is one striking difference between the organic and inorganic machines, which is worthy of notice. The organic machine is so constructed as to carry off out of the way by its own operations, whatever becomes worn out and useless; and at the same time, drawing from the proper source, supplies for the very waste occasioned by the removal of the worn out matter. And thus the very motion that wears it away, is also engaged in manufacturing materials for its repair.

The useless and worn out matter is carried off from the system by what is called the excretions, and the organs which carry on this process are termed the emunctories or exhalents. The removal of this matter prevents the wheels of life from being clogged with it; and also makes room for the new supplies constantly furnished from the sources of nutrition and respiration. The excretory process however is not stopped if the proper supplies of nutrition are checked or withheld; for the emunctories continue their functions during either sickness or long fasting;—it is the excretory process that reduces the fleshy man to a lean one, and the sick, to an emaciated skeleton, when the sources of nutriment are cut off, or at least, so reduced as not to furnish supplies equal to the waste. The excretions are;

1. *Pulmonary Transpiration.*

By this is meant the exhalation of the useless or worn out matter from the lungs. There is always something abstracted from the blood, at every breath we draw, in the act of changing the venous into arterial blood. It has been ascertained by chemical tests, that the blood contains more carbon than the other parts of the body; and consequently, while the glands are separating from the blood, the various materials which compose both the fluids and solids of the body, there will be a superabun-

dance of carbon left. If this were not removed, it would accumulate at every circulation, until the obstructed wheels of life could no longer move.

2. *Cutaneous Transpiration.*

Perspiration and sweat, are the peculiar terms by which the product of cutaneous transpiration, is commonly known. This excretory process, is constantly carried on while the body is in health, though imperceptibly, unless the animal heat is raised by active exercise or otherwise, then perspiration is so copious, that it cannot be carried off by the air as fast as it transpires; it then forms watery drops on the skin, and is commonly called sweat.

Whatever is deposited by the blood, after sometime, ceases to answer the purpose of sustaining life;—this, with whatever else, that becomes worn out and useless, is carried off by the emunctories to make room for new materials to act their part. Cutaneous transpiration is one of the most extensive excretions from the human system; and its importance is evinced by the deleterious effects that result from its being checked. Like the steam in the steam engine, when it has exhausted its force, must be thrown off, to make room for a fresh supply of power, or the machine will be stopped.

3. *Urinary Discharge.*

The urine also carries off from the system worn out matter, such ,as salts, earths and water. Having performed their part in the active operations of life, they give place to new materials to carry on the purposes, they had become incapable of serving. Disease is the result of the check or stoppage of this excretory process; but its too active operation is more fatal, as it wastes the substance of the body faster than the regular supply of nutrition can repair it.

4. *Alvine Discharges.*

This denotes the discharges from the intestines by stools. Through this channel are discharged the grosser parts of the alimentary matter we take into the stomach, after it has yielded its nutritious particles to the

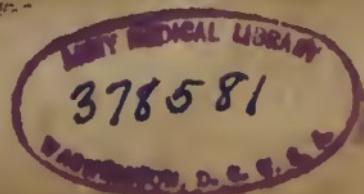
lacteals, together with a mixture of bile, mucus, and other excrementitious matter, poured into the intestines by the excreting vessels that terminate on their internal surfaces.

The exhalents or vessels that throw off the excrementitious and worn out matter from the system, diverge both ways, and terminate on the internal surface of the intestines, and on the external surface of the skin. When perspiration is free and uninterrupted, the determining powers are said to be to the surface; but when it is otherwise, the determining powers are said to be inward.

The regularity of the stools, like every other function of the living machine, is of great importance to a healthy vigorous state of the body. The fæces are gradually moved towards the fundament by the peristaltic motion of the intestines. When this motion becomes excited, the digested aliment is driven too rapidly through the intestinal canal to yield its nutrient and stimulant powers to the lacteals; and hence debility and emaciation is the necessary result. When the determining powers are inward, the intestinal exhalents pour into the intestines a superabundance of fluid, producing liquid stools, which have a very debilitating influence upon the body. Any acrid, irritating substance introduced into them, such as a drastic purge, excites the action of the exhalents, and induces debility by producing liquid stools. Great caution ought, therefore, to be observed in administering drastic purges to patients laboring under bodily weakness; for few things have a more debilitating influence upon the system, during the time they operate, than drastic purges.

The peristaltic motion so sometimes becomes so diminished in its force and frequency, as not to carry off the fæces in the regular and proper time; this is the cause of costiveness, which if long continued, produces a formidable train of symptoms that are sometimes difficult to remove. Nor does it diminish the danger of these symptoms, for *medical metaphysics* to regard costiveness as a symptomatic, and not as a primary disease.

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The regular and constant action of the emunctories in cleansing the body by removing the useless and worn out matter from it, tends to preserve the system from putrefaction and decay. And the constant wearing out, and subsequent removal of the substance of the organs, indicate the necessity of regular recruits to supply this waste. Let it be remembered that every thing intended to support the growth and supply the waste of the body, passes into the blood, and by its circulation, is distributed to every part. During the progress from infancy to mature age, more matter is separated from the life-sustaining fluid by the nutritive secretions, than is removed by the exhalents; whence results an increase of the bulk or size of the body during this period. The daily reception of such articles of aliment, as can be converted into a substance of the same kind and nature with that from which the waste takes place, is indispensable, or emaciation necessarily ensues.

It was a prevalent opinion among ancient physiologists, that the body was entirely renewed in the course of time, by this constant change of matter which is continually taking place. That the materials which compose the body are changing admits of no reasonable doubt; but that the entire body is thus periodically renewed is not satisfactorily known. It is certainly a most curious phenomenon in the animal economy, that one set of organs called exhalents or emunctories, should be busily employed in carrying off the useless and worn out matter from every part of the system; while at the same time another set of organs are engaged in forming all the different substances of the body, such as bones, muscles or flesh, cartilages, ligaments, &c. &c., out of the new materials regularly furnished. This process of compounding and decomposing the proximate elements which compose our bodies, most undoubtedly, to a certain extent, is continually going on within us. This double process is indispensably necessary to our healthful existence; and essentially constitutes vitality or life. If the excretory process is checked or obstructed,

ed, disease is the consequence; and if the secreting organs are not supplied with the proper materials, or if they fail to perform their proper functions, debility and emaciation unavoidably follow. It is this active operation of the living machine, that distinguishes organic from inorganic bodies; and no doubt prevents putrefaction and decay from laying hold on the animal substance, while its regular, unobstructed operation continues.

What an admirable specimen of the infinite skill and goodness of the Divine Architect, is exhibited in the structure of the human system! How multifarious and complicated its machinery; yet how harmonious their operations! Each part with the most undeviating accuracy, answering the purpose for which it was formed, so long as it is unobstructed by disease or injury! We admire the complicated structure, and uniform operation of LOCOMOTIVE ENGINES: we are struck with astonishment at the account of those prodigious engines invented by Archimedes; but what are all the inventions of mechanical genius in the world, compared to this living machine, which, while unobstructed, dispatches its multifarious operations with an accuracy that never mistakes, and with a dexterity that is unequaled. In comparison with this, the best executed and most elaborate efforts of art, are defective, like the horticultural imitations of the chisel compared with the masterly and inimitable models of vegetation.

SECTION V.

OF ANIMAL HEAT.

By this term, we do not intend the reader to understand that animal heat differs from the heat of any other body; but by it we merely mean that heat, which is necessarily present in the animal system to sustain its living operation, and without which life itself cannot exist.

The temperature of the body is several degrees above the temperature of the air even in summer, consequently the animal system cannot derive its heat from the temperature of the climate, as it is always above it; therefore the heat of the body must be, in some way, produced within it, in sufficient quantities to maintain an equal temperature in all seasons. The heat of the blood is marked on Fahrenheit's thermometer at ninety eight degrees. And a thermometer held in the mouth of a person in health, would scarcely vary a single degree whether it were tried in summer or in winter, in the frigid or torrid zone; nor does the thermometer indicate any considerable difference in the temperature of the body, when we are overcome with the sensation of heat, or shivering with cold. There is a vast difference it is true, in the sensations of a person in these two cases; but the difference exists at the surface on'y; for it is by the surface we judge of the sensation of heat or cold, which is merely an absence of caloric or matter of heat.

We readily admit that in one case the animal heat is generated more rapidly than in the other; but the process of perspiration acts as a regulator, and on principles readily apprehended by the chemist, equalizes the temperature of the body. And this is another evidence of the *wisdom* and *benevolence* of the Divine Architect, in so directing and controlling the operations of the living machinery, that its temperature will not vary with that of the atmosphere, nor with the gentleness or violence of our exercises.

Notwithstanding we have the most satisfactory evidence that animal heat is generated within us; yet the means by which it is generated and kept up in the system, lie so remote from the ken of observation, that the most ardent chemical and physiological research has hitherto been unable to ascertain with certainty, either the seat or mode of its production.

Nature's Author has assigned an organ, or organs, for the secretion or formation of every other material necessary to promote the regular operations of the living sys-

tem; but no organ has yet been detected whose office it could reasonably be supposed was to generate caloric or matter of heat, a substance absolutely indispensable in the animal economy. And indeed, from the nature of this subtle fluid; the facility with which it radiates, tending to an equilibrium in surrounding objects, we should judge that no one organ could be the instrument of its generation, and equal diffusion through the system.

We must believe that the production of animal heat is a process of vitality, (and not vitality itself, as some suppose,) and probably, never will be perfectly understood, until the nature of vitality is more fully comprehended. No theory has yet been proposed to account for its production, which is not liable to weighty objections; nor do we think any one likely to be offered, that will be entirely free from some, until the nature of the vital principle be more perfectly comprehended.

It is no uncommon thing however, for philosophy, when she has collected all the facts she could, on any subject of absorbing interest, to surmise the balance, and from analogical deductions drawn from the assumed and ascertained principles to frame a theory, which, when invested with learning's purple and scarlet robes, she introduces into the walks of science, as a valuable acquaintance. Whether the practice of offering theories in explanation of subjects not perfectly understood, springs from an effort of the pride of *learning* to conceal her ignorance; or from a more worthy desire to glean from the prolific fields of speculation, something that might embellish knowledge, or add to the treasures of science, we shall not stop here to inquire. And without pretending to decide which of the above named motives govern us, we must beg the reader to take a short promenade with us in the fields of speculation; and we will try to serve up for his special entertainment, such a theory of the means by which animal heat is generated, as we think best accords with the chemical and physiological facts, we have been able to collect on this interesting phenomenon of the animal economy.

And as we are writing for the benefit of common people, and not merely for the chemist and physiologist it will be necessary that we first explain some well established chemical principles or facts, so intimately connected with this subject, that their explanation will be indispensable, to render our views of the means of generating animal heat, intelligible to those who were not in the previous possession of these chemical data.

It is a well established fact with which every chemist is familiarly acquainted, that different bodies possess different quantities of caloric or matter of heat, at the same temperature; i. e. when the thermometer would indicate that both possess the same quantity of sensible caloric, it requires quite different quantities of caloric to raise them to the same degree. By sensible caloric we mean that which may be detected by a thermometer, or perceived by the sense; thus if we lay our hand on a heated body, we feel only the caloric which leaves it, and enters the hand; for it is impossible that we could be sensible of that which remains in the body. All substances do not feel hot in proportion to the quantity of caloric they contain; thus the quantity of caloric that would raise the temperature of one pound of water ten degrees, would raise a pound of oil twenty degrees; and the consequence would be, that the oil would feel twice as hot as the water although the water really contains as much caloric as the oil, which may easily be ascertained by pouring them both in equal portions of cold water. Now if they both contain equal quantities of caloric, they will raise the temperature of the two portions of cold water to the same degree, which on trial is found to be the fact. If the water had been heated enough to raise it to twenty degrees as well as the oil, it would then contain twice as much caloric as the oil, although the sensible caloric in one is equal to that of the other as would be indicated by a thermometer or by the sense of feeling; but by pouring each of them into a pound of cold water, it will be found that the temperature of the cold water, into which the pound of hot water was

poured, is raised ten degrees, while that into which the hot oil was poured, is only raised five degrees. In this case, the pound of hot water, when poured into the pound of cold water, lost ten degrees to raise the cold water ten degrees; but the oil lost fifteen degrees to raise the pound of cold water into which it was poured, five degrees. This is a satisfactory proof that these two substances, at the same temperature, really possess different quantities of caloric.

The disposition of a substance to receive more or less calor *c* to raise its temperature is called its *capacity* for caloric; and the caloric employed to fill the capacity, is called *specific caloric*. If the reader be a little puzzled to discover the propriety of applying the term *specific*, to caloric, we would just remark that it is employed to denote the relative quantities of caloric required to raise different *species* or kinds of bodies to the same temperature.

Now for the application of the above facts or principles to the matter in hand, viz: the production of animal heat. Some experimental chemists tell us that the capacity of arterial blood for heat, exceeds that possessed by the venous blood. If this be a fact, and it is admitted even by those who deny the inference drawn from this fact, that there is some difference, the generation of animal heat can readily be accounted for, in a manner quite satisfactory.

We have in a former section, shown that the blood in circulating through the lungs, undergoes an important process, which changes the venous into arterial blood. This change is effected in the act of respiration, by the air imparting a portion of its oxygen to the blood, and abstracting carbon, and perhaps some other impurities from it. The carbon thus abstracted from the blood, combines with the remaining portion of oxygen and forms carbonic acid, and of necessity forms a process similar to combustion, and consequently must, at every breath, produce a degree of heat, that would be attended with a serious inconvenience, were it not that the ar-

Arterial blood possesses a greater capacity for caloric than venous blood; and thus the caloric produced by the combination of oxygen and carbon in the act of respiration, which changes the venous into arterial blood, is employed to satisfy this increased capacity; and does not therefore, increase the temperature of the lungs. And as the blood gradually supplies the various secretions in every part of the body, it gradually returns to the state of venous blood; and consequently its capacity for caloric, is gradually diminished, and the caloric which went to satisfy the increased capacity, is gradually set free and diffused throughout the system.

That respiration is intimately concerned in this phenomenon, is fairly inferred from the fact that the quantity of heat in different animals, is proportioned to the quantity of oxygen they consume. And further, we are perfectly unable, on any other plan than the one above proposed, to give a rational account of what becomes of the caloric produced by the combination of oxygen and carbon which always takes place in the act of respiration, and renders it a process perfectly similar to that of combustion;—a process necessarily attended with the production of heat in proportion to the quantity of oxygen and carbon combined.

In addition to the above general means of generating animal heat, there are some that may be considered as auxiliaries, viz: the secretions and friction. The change of fluids into solids is universally attended with the disengagement of the caloric of fluidity, which was before latent, but now becomes free or sensible caloric. We have heretofore shown that both the growth of the body was supported, and its waste supplied by secretions from the blood. The secretions must therefore be accompanied with the disengagement of caloric, and as these are constantly going on in every part of the body, they must be continually yielding a portion of caloric to every part of the system.

Friction it is well known, according to a universal law of nature, also produces caloric or matter of heat. A-

widst all the operations carried on by the complicated, organic machinery, "and particularly the circulation of the blood through the minute vessels which seem almost to compose the very fibers of the flesh, there must be considerable friction, and necessarily a corresponding production of heat.

We must now take our leave of the theory of the production of animal heat, and devote a section to the consideration of its use in the animal economy; and the means by which it is wasted or diminished.

SECTION VI.

OF THE USE, AND WASTE OF ANIMAL HEAT, &c.

Most readers no doubt have derived the most convincing testimony from their own observation and experience, that a certain portion of caloric or heat is indispensable to promote the healthful and regular operations of the vital functions. So important is the influence which it exercises over the system, and so inispensable it is to the healthy operations of life, that several, both of ancient and modern times, have mistakenly regarded it as constituting vitality itself.

Animal heat is necessary to impart to, and maintain a proper consistence among, both the fluids and solids of the body. Its presence in a proper quantity, renders the vessels soft and pliant, and attenuates the fluids; and thus both are prepared to promote the circulation with healthy regularity and ease. The sensibility of the nervous system greatly depends on the presence of a due proportion of heat. In reference to this subject, the numbing effects of cold is obvious to all; and the necessity of more violent impressions upon the nerves, in order to produce sensation, has, we doubt not, been remarked by the most of men. When a sufficiency of heat is not generated in the system, the fluids become

thick and viscid; the vessels lose their softness and pliancy; the circulation is rendered languid and feeble; the process of nutrition is interrupted; the removal of the useless and worn out matter from the system is checked; and death will soon close this train of functionary disasters, unless they are speedily restored to their proper operations, by raising the animal heat to its proper temperature.

We have before remarked that the heat of the body was above the temperature of the atmosphere even in summer. This subtle fluid cannot be confined in any substance that is in contact or even near a colder body. It will radiate with greater or less facility from all bodies whose temperature is higher than that of the surrounding bodies, constantly seeking an equilibrium, or more properly an equal diffusion through all; consequently the heat of the body is constantly escaping, or wasting away. Sometimes the animal heat is reduced or carried off so rapidly as to check or derange the vital functions, by producing an obstruction of the cutaneous transpiration, or of the glandular secretions. Disease is the unavoidable result of all obstruction, and its violence and obstinacy, is generally proportioned to the extent of the obstruction. Both the dictates of reason and the results of experience indicate the propriety of that course of treatment which immediately effects the removal of the obstruction, which must be done by restoring the bodily heat to that degree of temperature that will give pliancy to the vessels of the organs, and remove the viscid state of the fluids.

As the sudden reduction of the animal heat, or as it is more commonly phrased, the "catching of cold," gives origin to many of the febrile and inflammatory diseases which besiege the citadel of life, it will be proper that we bestow some attention to that subject; for an "ounce of preventative is sometimes better than a pound of cure."

As the temperature of the body is above that of the atmosphere, it must be constantly losing heat; and when exposed to a current of cold air, the loss of heat is much

more rapid. A current of cold air coming in contact with the body, brings successive portions of fresh cold air in constant contact with its surface; and effects a very rapid, and often a fatal reduction of heat, unless the body is well shielded with clothing. An exposure to a current of air pouring through a small aperture in the wall of a house, or through a broken pane of glass, is very apt to prove hurtful; for the contact of cold air affecting only a small portion of the body, generally produces such a reduction of heat in that part of the system, as to obstruct a healthy action, before the reduction of the general temperature would admonish the person of his danger.

To sit or lie down on the cold damp ground, or any other cold or damp body that is a good conductor of caloric, carries off the heat, and produces that effect called "catching cold."

The evaporation of the perspirable matter from the surface of the body, is continually carrying off all that degree of heat necessary to satisfy the increased capacity of the perspiration, when changed from a fluid to vapor. Great caution should be observed, when the body is covered with a profuse perspiration, not to expose it in a situation to promote a sudden evaporation, lest the consequent rapid reduction of heat cause obstruction with its train of febrile and inflammatory disorders.

The rapid reduction of heat by evaporation, may be illustrated by observing its effects in a few cases. Water is readily frozen even in summer time, in countries that have a dry atmosphere, by exposing it in shallow earthen pans or dishes, in elevated situations, to the cool dry breezes of the night. Such an exposure promotes a rapid evaporation from the surface of the water; and the increased capacity of the vapor for caloric, is satisfied by abstracting the caloric of fluidity from the water, which in a short time reduces it to the freezing point. To freeze water in this way requires a brisk cool breeze and a dry atmosphere; for if the air is still, or the atmosphere damp, evaporation will proceed too

slow to effect congelation. When evaporation is slow, the absorption of latent caloric from the water, and its consequent reduction of temperature is effected too slowly to form ice; for the radiation of caloric from surrounding objects in this case, can supply the waste fast enough to keep its temperature above the freezing point; but when evaporation is rapid, the radiation of caloric from surrounding bodies cannot supply the waste fast enough to prevent freezing.

Most washers, no doubt, have observed that wet clothes hung out in a cold dry, brisk atmosphere, will freeze before they will dry, even when the temperature of the air is five or six degrees above the freezing point. The freezing of the clothes, in this case is occasioned by the rapid evaporation from them; employing the latent caloric to fill the increased capacity of the vapor for caloric.

From the above it will be seen that exposing the body, when in a profuse perspiration, in any situation that will promote the rapid evaporation of the perspirable matter from it, produces a reduction of temperature so suddenly that it rarely fails to cause *obstruction*.

We trust the remarks we have offered on this subject, are sufficiently clear and pointed to convince the reader of the importance of animal heat to the living functions, and to admonish him of the danger of suffering a loss or a reduction of it. In another place the means, and the beneficial result of restoring it, when so far reduced as to cause obstruction and disease, will be pointed out.

SECTION VII.

OF PERSPIRATION.

We have already had occasion to speak of the perspiratory excretion, and have made some remarks on its uses and effects; but the controlling influence it maintains

over the integrity and harmony of the living operations, gives it an importance that demands a distinct consideration.

Perspiration is generally distinguished as sensible and insensible; but this distinction is founded merely on the difference in quantity. It is only when perspiration is profuse, that it is sensible; its ordinary operation is called insensible, because the perspirable matter is imperceptible.

Perspirable matter is generally supposed to be separated from the blood, which by this excretory process, is kept in a healthful state of purity. The organs which separate it from the blood, are termed the exhalents or emunctories, and are the minute extremities of the cutaneous arteries. The vessels which circulate the blood through the skin are so completely dispersed through it, that you can not put down the point of a pin without puncturing one. The constituent parts of the perspirable fluid, appears to be water, nitrogen or azotic gas, an animal gas, the subcutaneous oil, and serum of the blood.

The removal of the materials, which are worn out, and no longer useful, from the system, is a cleansing, purifying process, so important to the body, that good health can not be enjoyed without it. When perspiration is obstructed, a mass of morbid, putrescible matter accumulates in the blood; and this natural outlet for the surplus matter continually collecting in the blood, being shut up, the wheels of life become clogged, the organic functions deranged, their fibers irritated, and some febrile or inflammatory disease is brought on.

If the obstruction of perspiration by cold or any other cause, and the retention of the perspirable matter in the system, produces a diseased and morbid state of the blood, and thus brings on febrile and inflammatory complaints, does not nature indicate, common sense teach, and experience prove, that the safest, most efficient, & most rational mode of removing this morbid matter from the blood, must be by opening the outlet, nature has provided for

carrying it off from the system. It is the obstruction of the emunctories, and the retention of the putrescible matter in the system, that vitiates the blood; for if the excretory functions had continued their regular operations, this morbid matter would not have been permitted to accumulate, consequently the proper course to remove it, is to open the obstructed outlet nature has designed for its removal. And as the obstructed state of the exhalents, has produced the accumulation of the putrescible matter in the system, artificial means must be employed to promote the rapid discharge of it by sweating. The means of doing this, in its proper place, will be more particularly described.

Every thing that enters the system, is provided with its proper channel to carry it off, when it becomes worn out and useless. The perspiratory process is the proper outlet for all extraneous, irritating, putrescible or poisonous matter from the blood. When a poisonous substance is taken into the stomach, unless it be thrown out by immediate vomiting, the poison is taken up by the absorbents and thrown into the blood, and diffused by the circulation to every part of the system. If the poison be inhaled into the lungs in the form of gas, it enters the blood, and is by it diffused through every part, where the purple tide circulates. When the vital stream is thus infected with the seeds of speedy dissolution, puking, purging, bleeding &c, cannot reach the case: perspiration, the grand emunctory of blood, is the only means by which it can be speedely and effectually removed. From these considerations, it appears that the regular operation of the perspiratory organs, is not only indispensable to a healthy state of the system, but becomes an essential auxiliary in the speedy and successful removal of disease. This, in its proper place, will be more fully illustrated.

CHAPTER III.

ART OF PRESERVING HEALTH.

THE enjoyment of perfect health, is one of the greatest earthly blessings that fall to the lot of mortals. A short treatise, therefore, on the art of preserving it, must, from the importance of it, be an essential and acceptable article in a work of this kind. A book, to be useful as a family medical adviser, should not only show how to remove disease, but how to shun it; and secure, as far as possible, a healthy, long life. Without health beauty, honor, title, wealth, the kindness of friendship and the tenderness of affection, are all insufficient to render a man even comfortable; or to assuage the pangs of disease, and give a relish for the business of life. To a man laboring under disease, the world is but little better than a dreary solitude;—a cheerless waste, enlivened by no variety;—a joyless scene, cheered by no social sweets.

Health is an invaluable prize, generally secured and retained by those who have moral firmness enough to curb their lust, check their appetites, control their passions, and submit to the regulations of virtuous and temperate habits. It consists in the regular, harmonious operation of all the organs performing with an undeviating exactness all the functions in the system. Whilst this is the case, there is ease, and health;—the body is not now the field of contest between *life* and *death*, where enfeebled vitality is rallying her wounded forces to struggle a little longer for her citadel.

One principal reason why men are so often sick, is

their disregard of the preservatives of health. We frequently, by irregular and intemperate practices throw open the gates of life, and provoke the troops of death to, enter and besiege the citadel of vitality.

If we would maintain a healthy state of the system, we must pay proper attention to the quantity and quality of our food and drink; the air we breathe; the clothing we wear; due cleanliness; necessary exercise; sleep; excretions; and the proper regulation of the passions. We will consider each of these, and endeavor to enliven our treatise with appropriate illustrations, which we trust, will not only interest the reader; but enforce the truth and importance of the subject on his mind.

SECTION I.

OF FOOD AND DRINK.

As we can not live without food and drink, the Author of our existence has furnished us with two appetites, to admonish us when a supply of either is necessary: the one for food, we call hunger, and the other for drink we call thirst. Were it not that these appetites admonished us with calls too imperious to be neglected, we might, amidst the hurry and bustle of business, the eagerness of pursuit, or the enchantments of pleasure, forget or omit to take at proper times, and in proper quantities, the aliment necessary to sustain the healthful and vigorous operations of the living power. The sensation of hunger always informs us that nature demands a fresh supply of nutriment; and thirst indicates that water is needed.

We may injure health by eating and drinking too much, or by taking improper kinds of food and drink; and lastly we may weaken nature's powers by withholding a due portion of nourishing food. But the error into which most people fall is eating too much.

The renowned Hippocrates observed, that he who eats and drinks sparingly, is not likely to bring disease upon himself; and that a moderate supply of food nourishes the body best. The quantity which nature really requires for her support, is not so much as is generally supposed; and he that lives temperately stands fair to enjoy a clean stomach, a clear head, with sprightliness and vivacity. But he that loads the stomach with more than it can easily bear, impairs its digestive powers. The food being retained in the stomach longer than the laws of circulation allow, undergoes a disorderly fermentation producing crudities, sour eructations, flatulency, headache, stupor, &c.

He that would consult his health, must put himself under the regimen of temperate diets, which he can do without interruption to business, loss of money or time. He must also pay strict attention to the kind of food most nourishing, and easiest digested; for the Epicurean proverb, that whatever is agreeable to the palate, must be wholesome and nourishing, is the error of those who place their *summum bonum* in good eating and drinking. The maxim of Socrates, the renowned philosopher of antiquity, was, "That we ought to eat and drink to live, and not live in order to eat and drink."

It would be difficult, if not impossible to lay down fixed rules to determine the salubrious and insalubrious effect of different aliments, on every individual. Experience must be our chief guide as to the quantity and quality of articles of diet; for such is the peculiarity of constitutions, that the same article which would nourish, and perfectly agree with one, would prove highly pernicious to another.

To secure health, we must curb our appetites, and not load our stomachs, because our high seasoned provisions, provoke a desire for more. A person in health requires no artificial incentives to provoke a desire for food; for the natural appetite, will always admonish us to take a proper quantity of wholesome food if necessary. The practice of employing bitter and spicy drugs will the best of

condiments in the art of cookery, to excite an *artificial* appetite is invariably pernicious. A convincing proof of this fact, may be seen by observing the difference in the vigor of the constitutions of those whose limited means confined them to a few simple wholesome articles of diet, and those who fared sumptuously every day, on a variety of well seasoned dishes. This kind of diet may not manifest its pernicious effects immediately, yet, it nevertheless, undermines and breaks down by a gradual operation, the vigor of our constitutions, destroys the healthy tone of the digestive organs, and entails upon us, a stubborn train of chronic disorders, troublesome to bear, and difficult to cure.

The anecdote about Esculapius and Chremes, though in the garb of a fable, furnishes a moral too instructive to be cast into the shades of oblivion, amongst the general mass of worthless things.

Chremes, a noble Grecian youth, had, by indulging luxurious and intemperate habits, destroyed the vigor of his constitution, and passed his cheerless time in a sickly infirm state, subject to fits or trances. In one of these, he thought that a philosopher came to sup with him; and out of all the dishes served up at the table, he would only eat of one and that the most simple; yet, to his astonishment, the philosopher's countenance was cheerful, his conversation sprightly, his knowledge great, and his constitution strong. When the sage took his leave, he invited Chremes to sup with him, which, in imagination, took place. He was received, as he thought, with the most polite and affectionate tokens of friendship; but was greatly surprised, when supper came on to find only a few plain dishes, to which cheerfulness and good sense were the only sauces. As Chremes' dainty stomach could not relish plain wholesome diet, the philosopher ordered another table to be spread with delicacies more suited to his taste. Immediately a table was set loaded with the greatest variety of high seasoned dishes that luxury could invent, with the richest wines. These were accompanied with damsels of the most be-

witching beauty. Chremes thought that he now gave the reins to appetite; and every thing he tasted, gave pleasures beyond any thing he had before known. Their charms enchanted the enraptured guest, already heated with what he had drunk. His senses were lost in ecstatic confusion. He was in his Elysian, basking in the ocean of Epicurean felicity, when lo! on a sudden, their beauty, which was but a visor, fell off, and forms the most hideous and forbidding, stood before him. Lust, disease, like a many headed monster with dismal visages ghastly with death; Skull the son of Skeleton, a native of ghost-land, of the tribe of the bloodless; meager poverty, frantic despair, revenge, murder &c., now appeared in their own hideous shapes, rendering the place a scene of misery and desolation! The astonished Chremes eagerly sought to fly from such a diabolical company.—His blood ran chill to his heart; his knees smote each other through fear; and horror seized his mind. When the philosopher perceived that this scene had made a sufficient impression on the mind of his guest, he thus addressed him: “Know Chremes, that it is I, Esculapius, who has thus entertained you; and what you have seen, is a true image of the deceitfulness and misery connected with habits of luxury and intemperance.—Would you be happy and healthy, be temperate. Temperance is the parent of health, cheerfulness and vivacity. It is indeed, the true luxury of life; for without it, life cannot be enjoyed.” Chremes awaked, instructed by the vision, and altered his mode of living. He became temperate, frugal and industrious; and by these means recovered his health, and lived to a good old age free from pain or disease; and was ranked among the seven wise men of Greece.

Should some sensualist object to the force of the truth illustrated by the above fiction, we will face him with a case of reality, that clearly exhibits the influence of proper diet on the health and vigor of the system.

Lewis Cornaro, a Venetian of noble extraction, is a memorable example of the effects of both luxury and

intemperance, on the health of the body. When young, he indulged in luxurious habits; and by the time he reached his thirty fifth year he enjoyed no health. His luxurious habits had brought upon him many afflictive disorders. From his thirty fifth to his fortieth year, he spent, or rather dragged out his days and nights in the utmost anxiety of mind and torture of body; and in truth his life had become a burden to him; wearier day succeeded wearier night. After his physicians had exhausted all the resources of their medical skill in fruitless efforts to remove his maladies, they exhorted him to try a temperate, regular way of living. They added, that unless he applied instantly and perseveringly to it, his case would soon become desperate. Upon this, he immediately prepared himself for his new regimen; and he now began to eat and drink nothing but what was proper for one in his situation. This at first, was very disagreeable to him. He often lusted after the flesh pots of *Egypt*; and indeed, did sometimes indulge himself with a little freedom in his diets, but always at the expense of ease. Driven at length by necessity, he pursued a course of strict temperance, until he grew confirmed in the habit, by virtue of which, he assures us, all his disorders left him in less than a year. He lived afterwards, under the same regimen, in the enjoyment of good health, more than sixty years. At the advanced age of one hundred, he possessed an unusual degree of vigor and activity. He was able to leap on a horse from the ground, or to climb a mountain. His pleasures were not blunted by the usual imperfections of age; for, said he, "I enjoy all my senses in perfect vigor; and I have a better relish for the plainest food now, than I had for the choicest delicacies formerly, when immersed in a life of luxury."

As a general rule of diet, we ought to take such wholesome food, as experience shows to be easy of digestion, producing no sense of uneasiness nor oppression after we have eaten. We ought to take our meals at regular hours, and to escape as far as possible from

periods; for long fasting is hurtful at any stage of life, and is apt to be followed by too full a meal.

Animal food, in the general, is more nourishing than vegetable; it enriches the blood, increases the muscular strength, stimulates the organs, and accelerates the circulation; but at the same time, it disposes the body, more to fevers and inflammatory complaints, than vegetable food does. This is owing to its tendency to putrefy more rapidly than vegetables, it ought therefore, in warm climates to be taken sparingly, and then well mixed with wholesome vegetable diet.

Persons laboring in the open air, require both more and stronger diet, than those whose employments lead them to a sedentary life. The kind and quantity of food necessary for the former, would be highly injurious to the latter. Whatever can be most easily assimilated to the body, is best for them; as their digestive powers are feeble, they should have as little as possible to do.

The flesh of young animals is generally more tender: but that of full grown animals is in most cases, best; because the fiber has acquired its natural solidity and perfection, and the juices are sufficiently elaborated and exalted. In old animals the fibers have become too tough and rigid, and the fluids too acrid to yield a ready and healthy nutriment. In young animals the gelatine and fiber are not sufficiently perfected to administer a proper and wholesome nutriment.

Whatever we eat must be digested and assimilated to our own substance, in order to support the growth and supply the waste of the body; so the nearer any animal substance approaches to the nature of ours, the more readily will it yield us a proper nourishment.

Animals of the beeve kind, are wholesome, and liable to the fewest diseases. Their flesh is nearest akin to that of man, and is the most proper for his nourishment. mutton of mature age, and free from disease is wholesome and nutritive. The hog is generally a healthy animal, but feeds coarsely, and is principally composed

of gross, fibrous fat which is more difficult of digestion than beef or mutton, but is highly nutritive when digested, and is therefore suitable for those who labor in the open air as their digestive powers are generally good. The goose is nutritive, but is not easily digested, when dressed whole and stuffed; the fœtid, seasoned materials with which it is stuffed, renders it less digestible; the same may be said of other flesh when cooked with stuffing in it. The duck is a gross feeder, and its flesh is not easy of digestion. The turkey and chicken are wholesome, though not very nutritive. Fish is wholesome, nutritive and easy of digestion; though they readily run into a putrid state, and are then particularly unwholesome.

Vegetable diet ought to form a part of our meals, not only for the sake of nutrition; but to counteract the putrefactive tendency of animal food, especially in warm weather. With regard to this class of edible articles, we have only room to make one general remark, that whatever is easy of digestion and gives no uneasiness to the stomach, may be regarded as wholesome.—Let none act so inconsidrate, as to destroy their health, and endanger their lives, for the sake of yielding a transient gratification to their palate.

The liquid part of our aliment next claims our attention. Amongst these water is the most important; for we can not live without it. Water is necessary for the solution of our food to facilitate digestion; consequently the drier our food is, the greater proportion of water will be required. A diet composed principally of animal food will require more drink, than one composed chiefly of vegetables. Too much water, however, is hurtful, as it will weaken the action of the stomach and gastric juice, and retard rather than facilitate digestion, causing the food to pass off too quickly to yield its nutrient parts to the lacteals.

A good rule will be to take water moderately, whenever the sensation of thirst indicates that nature demands it. Caution ought to be observed not to drink

much when warm; for many by disregarding this, have destroyed their lives by one drink of cold water.

Persons laboring hard enough to keep up an increased perspiration, require much more water than those who do not. Climate and season have likewise an influence upon the quantity of fluids necessary. Excessively warm weather calls for a large supply of water, both, because it increases the quantity thrown off by perspiration, and in some measure suspends the energy of the fluid secreted by the glands of the stomach to promote digestion. For this reason the inhabitants of warm climates eat less, and drink more, than those of colder ones.

Water being the basis of our drink, we should be careful to obtain such as is pure. That is best which is clear, light, colorless, and without any particular taste or smell. On these qualities its wholesomeness very much depends; for it is very apt to take up parts of most bodies it comes in contact with, and by this means, is often impregnated with pernicious impurities. The best and purest water is that which issues from a gravelly, or sandy stratum of earth; because it not only imparts few if any impurities, but tends to clear it of impurities by filtration in passing through such a channel. Stagnant water, and such springs as issue in low marshy ground, are generally impregnated with impurities, tending to putrescence, and consequently can not be wholesome.

Impure water may be rendered fit for use, by filtering it through a soft porous stone, through sand, or through pounded charcoal. The most effectual way, however, to clear it of gross, feculent impurities is to distill it. When water is put up in casks to be kept sometime, as on long voyages, it should be put in vessels well charred to prevent it from becoming putrid or feculent. When the barrels have not been charred, and the water has become feculent and offensive, it may be rendered sweet again by putting a little fresh powdered charcoal in it, and letting it stand two or three days before it is used.

Milk is the food of the infant, and contains all the elements of nutriment. It forms part of the diet, both of children and grown persons, in many parts of the country. It is nutritive, wholesome, and easy of digestion; and children that use it instead of coffee and tea, have more vigor and health, than those who do not. Persons, whose powers of digestion are enfeebled, would do well to use a milk diet; if the milk be too rich for them, in its natural state, it may be diluted with water.

Coffee, or rather an infusion of the coffee berry somewhat toasted, is now very generally introduced to the breakfast table, as a liquid part of the diet, and sometimes at other meals. It is certainly less nutritious than milk; but when properly made, and not drank too hot, nor in too great quantities, it is generally considered an agreeable beverage, that affords some assistance to the concoction of other kinds of food. It is more stimulant than nutritive; and on that account, it is possibly a very proper part of the diet of the aged and infirm, who stand in need of something to exhilarate the spirits. Its sedative, exhilarating and antispasmodic properties render it a proper article in the diet of the hypochondriac, and those subject to the hysterics. When coffee is drank in considerable quantities, and made strong, it affects the nerves, and produces watchfulness.

Tea is frequently introduced to our tables as a part of our meals; particularly in the evening. Good tea, taken in moderate quantities, neither too hot nor too strong, is not only a pleasant beverage, but a salutary one. But when taken too warm, or in too great quantities, or too strong, it certainly affects the nerves, weakens the tone of the stomach and in many persons causes some interruption to sleep. Some, under the idea of strengthening the digestive powers, and counteracting the relaxing effects of strong tea, are in the habit of adding a little spirits to it; but this is certainly making a bad case worse.

Chocolate is made from a nut or bean, that grows on

the cocoa plant, combined with spice and some other ingredients. That which is made in America, or the West Indies, is much better than that made in Great Britain; for the former is made of the genuine cocoa beans, ground up with a proper portion of spice; the latter is adulterated with other beans, and mixed up with the oil of almonds, or butter. A decoction of the American chocolate forms a wholesome and very nutritious article of diet; but containing a quantity of vegetable oil, it is apt to cloy weak stomachs.

SECTION II.

OF EXERCISE.

It appears to be a law throughout the animal world, that no creature, without exercise shall enjoy health, or procure subsistence. The formation of our bodies and the very constitution of our natures, give evident indications that Providence designed that we should "eat bread by the sweat of the brow;" and he that seeks to thwart this purpose of the Creator, generally reaps a full harvest of afflictive disorders. The sluggard does not so much live, as *rust* away existence.

Exercise tends to give firmness and vigor to the body; tone and energy to the nervous system; free circulation to the blood; and a healthful determination of the fluids to the surface, cleansing from all morbid impurities. It prepares the body to be refreshed with sleep, and makes even the bed of straw pleasant;—it furnishes an appetite that relishes plain wholesome food, and preserves the healthy tone of the digestive organs. It gives clearness to the brain, vivacity to the spirits, cheerfulness to the mind, and elasticity to the whole system.

When proper exercise is not taken the strength and energy of the living machine gradually declines, and a morbid irritability is induced, with a fearful train of

distressing symptoms usually accompanying chronic weakness. The natural powers of the stomach and intestines are relaxed; the appetite vitiated; the bile and other fluids concerned in the digestive process, are imperfectly secreted, or partially obstructed; the muscles relaxed and debilitated; the whole animal economy deranged, and a train of nervous and hypochondriacal symptoms, together with palsy, gout, glandular obstructions, and many other complaints incident to indolent, inactive and sedentary persons, are brought on.

Proper exercise in the open air, is the only preventative of the endless train of diseases, which proceed from a relaxed state of the organs. To preserve the vigorous and healthy tone of the body, and the regular operations of its various functions, exercise should be taken as regularly as our food. The active and laborious are seldom the subjects of the train of troublesome disorders above enumerated. Exercise should not be carried to excess; for it then fatigues the body, exhausts the muscular strength, oppresses the spirits, and is productive of more mischief, than benefit. Active exertion soon after eating a full meal seldom fails to unstring the energy of the digestive organs.

To die, is the unavoidable fate of man, from the decree of Heaven; but to die of lingering chronic diseases, is generally the fruit of his own improper conduct.

The ancient Romans and Athenians, considered idleness as the rust of life, and the bane of virtue; and on that account, enacted a law, that exacted from every man an account of the means by which he procured a support for his family. When one was found who could not give a satisfactory answer, he was banished as an unprofitable excrescence, contributing nothing to the public weal, and as a *drone* that feeds upon the labors of the industrious part of the hive.

Those whose employment leads them to a sedentary life, should take regular exercise in the open air; for weak fibers and relaxed energies, are the constant and unavoidable companions of an inactive life.

Exercise is so essential to health that the want of it in many chronic complaints, renders them very intractable, if not incurable. Friction may be used as a substitute, when the patient is unable to take any exercise. Frictions may be made either with a flesh brush, a piece of flannel, or with the hand. This kind of exercise promotes both the circulation, and the excretions; and thereby tends to excite a healthy action in the system.

SECTION III. OF SLEEP.

SLEEP is the tender nurse of weary nature. Our bodies require regular periods of rest, and refreshment in sleep to restore the wasting vigor of its powers. The exercises of the mind, the brain and the bodily powers, exhaust the vigor of the body, and the vivacity of the spirits; but nature's Author has wisely, and beneficently provided, that balmy sleep, weary nature's kind restorer, should succeed this exhaustion, with adequate renovation. Sleep suspends the exertions of the body, stretches the relaxed limbs in a posture for rest, rolls from the pensive thoughts their load of sorrow, banishes the carking anxiety of care, the perplexity of business, and fatigue of application; and then distills upon the system its refreshing dews, and infuses its reviving *cordial*, renovating the vigor of the body, and imparting vivacity to the mind.

A broken disturbed sleep is not refreshing. Observe how kindly the Almighty has provided that we may enjoy the full benefit of balmy repose. He periodically, draws around us the sable curtain of darkness, concealing every object that might excite the senses. He conveys peace into our apartments, and imposes silence on the whole creation, and thus kindly removes whatever might obstruct its beneficial influence.

The principal directions we have to give on this sub-

ject, are to take a proper portion at seasonable hours. An insufficient quantity of sleep, does not yield a sufficient refreshment to give elasticity and vigor to nature's wearied powers; and too great indulgence in sleep brings on a state of indolent stupidity, with a great want of the sprightliness and vivacity of life; the muscular motions become languid and debilitated, and the nerves and other fibers relaxed and torpid.

In general six hours are enough for adult persons, who do not labor hard, and seven for those who do. Young and old persons require more. When a person rises in the morning and does not feel refreshed, he may rest assured he has either taken too much, or not enough sleep. Some do well with five hours sleep.

To enjoy quietude and repose with refreshing sleep, we should eat light suppers, if we eat any, and at least one or two hours before retiring to bed. A loaded stomach occasions frightful dreams, nightmare, disturbed rest, &c. Retire with a calm mind, un vexed with passion,—at peace with God,—at peace with man, then may you expect your sleep to be sound and refreshing.

He, that, frequently, breaks his accustomed repose, by indulging in scenes of mirth and debauchery, or by suffering his mind to become the prey of anxiety, or any other passion, will soon find his whole system thrown into disorder; his appetite impaired, his spirits dejected, and a restless, uneasy feeling will afflict the whole body.

Sleep accompanied with talking, is called somnoliquism; and accompanied with walking, is called somnambulism. Both these states may be regarded as transient paroxysms of delirium, generally induced by a disturbed or deranged state of the mind. Let persons thus afflicted, take pains to secure a healthy vigorous action of the bodily organs, by proper regimen and exercise; and retire to bed with a calm serene mind: this will generally effect a cure.

Heather beds, particularly in summer, are less healthy, though more pleasant, than mattresses, or clean straw beds. We are aware, however, that many persons have

not fortitude enough to forego the pleasure of feather-beds, even to secure a more vigorous constitution; let such shake and air their beds every day, that all the feculent matter, that escapes from the body by perspiration during the night, may be carried off. Let the bed rooms be well ventilated, during the day; and admit a sufficient supply of fresh air during the night, to answer the purpose of respiration, particularly in warm weather.

SECTION IV. OF THE EVACUATIONS.

THE regular removal of the worn out, impure, and noxious matter from the body, is no less necessary to health, than its nourishment. It is, therefore, an object of the first consequence, that nothing be allowed to remain in the body which ought to be evacuated. Nature is furnished with the proper organs, for carrying off all superfluous and hurtful matter, unless they become obstructed. When the emunctories are obstructed, the crude, acrid, putrescible matter accumulates in the system, and unavoidably produces disease. Our attention ought to be particularly directed to keeping them open, and their operations regular. A proper attention to the rules for preserving health, and to what has been said under the head of perspiration, will in general, secure the regular operation of the emunctories. When they do become obstructed, medical means must be resorted to, which will be described in the proper place.

It sometimes happens, that the peristaltic motion of the intestines, becomes too languid and unfrequent to effect a regular and proper discharge by stools, and a partial constipation of the bowels is the result. Persons thus troubled, should not have frequent recourse to purges; for an evil consequence attending such a practice, is that in time, the bowels will not act without them.

To obtain a regular motion of the bowels, rise early and take gentle exercise before breakfast; and at some convenient time, retire regularly, each day to the temple of Cloacina, whether you have a call or not, and by proper efforts, solicit nature to do her duty, at each visitation. Persevering efforts of this kind, have in numerous instances, completely removed a habitual costiveness, and established a perfect regularity in the action of the bowels.

As we have had occasion to speak of the evacuations by the emunctories in a former section, we forbear to add any more remarks at this place, as all further necessary information on this subject can there be found.

SECTION V.

OF CLOTHING.

CLOTHING is not only necessary to hide the nakedness of the body; but is necessary to preserve the proper temperature of the system. Clothes do not assist in generating the heat of the body; but prevent the heat from escaping too rapidly from it. From the diffusible nature of heat, constantly radiating from warmer bodies to those that are colder, the heat of the body is constantly escaping; but the clothing is designed to prevent its radiation, so as to effect a rapid reduction of the animal heat. Those articles of clothing are warmest, that is, suffer the heat to escape the slowest, which are the worst conductors of caloric. Furs are the warmest, wollens next, and cotton goods next, and linen the least. The difference observed by the sense of feeling, between a linen sheet and a blanket, on getting into a bed of a cold night, exists entirely in the different facilities with which these two substances conduct caloric or matter of heat. The sheet is really no colder than the blanket; but the sheet being the best conductor of caloric, conveys off

the heat of the body, and thus produces the sensation of greater cold than the blanket does; for it being a bad conductor of caloric, does not carry off the heat so rapidly, and consequently will not produce as strong a sensation of cold. It is the difference in the conducting powers of the different articles of clothing that makes one kind feel warmer than another. Color also affects the warmth of clothes. Black or dark colored clothes are warmer than light colored, ones when worn in the sun; because that color absorbs the rays of sun with the greatest facility; but in the shade they are not warmest, as that color radiates caloric faster than light colored clothes.

One of the principal things to be attended to, is to adapt our clothing to the climate and season. In winter, the body should be protected with warm clothing; in summer, let it be clad lighter. Observe the change of the temperature of the air; and let your clothing be regulated so as to preserve, as far as possible, an equal temperature in the body. The aged, and the infirm ought to wear flannel next the skin in cold weather; because, in them, the circulation is more languid, and their skin more rigid than that of young persons. But such clothing next the skin, will, in some measure, soften it, and promote the perspiratory discharge.

The quantity of clothing necessary for each individual, can not be ascertained by reasoning; for the robust require less than the infirm. It is a matter that must be entirely determined by experience. Each individual can best determine for himself, what quantity is necessary to preserve his body sufficiently warm and comfortable.

Individuals of infirm and delicate habits, should never wear any article of linen clothing next the skin, even in summer; for it conducts off the animal heat too rapidly for them. Indeed, we cannot recommend it even to the more robust as a suitable article to wear next the skin.

Clothes should never be put on when wet or damp; and if they get wet when on, it is safest to change them

immediately for dry ones, as in the act of drying on the body, the water is converted into vapor, which must extract heat from the body to fill its increased capacity for caloric, and consequently expose a person to the danger of "catching cold," as it is familiarly called. Many persons think there is no danger in this practice, because it does not stretch them forthwith on the bed of sickness; but we would say to such, that this conduct gradually lays the foundation of some stubborn chronic disease, as rheumatism, pleurisy, consumption, &c.

We can not dismiss this subject, without dropping a passing remark, on some of the pernicious effects resulting from yielding implicit obedience to the silly, whimsical mandates of the Queen of Fashion, the great Diana, whom the world worshippeth. Many female constitutions have been ruined; because they had more attentively regarded the disgusting, foolish dicta of the whimsical, silly Queen, in their manner of dressing, than the comfort and health of the body. Let Fashion but issue the preposterous edict, and the tender female frame must be rigged with ornaments that disfigure, decorated with that which will not cover, and dressed with that which will not defend the body against the inclemencies of the weather, nor keep it comfortable.

Tight lacing is one of the most destructive practices that fickle Fashion ever introduced. And yet every lady, who is ambitious to win the approving smile of the Queen, and be ranked amongst her votaries, cheerfully submits to this engine of torture, with a fortitude and resolution, that would, in a better cause, immortalize a hero, and canonize a saint! By means of cords, fish bones, steel ribs, &c., the stomach, heart, lungs, &c., are compressed closer and closer, till the poor victim can scarcely breathe; the flesh is sometimes excoriated, the ribs distorted and breast bone crushed! All this is borne, for the sake of moulding the figure, into the fine, delicate shape of a *wasp*!! The rose of health blooms not on the cheek of this devotee of fashion; nor does the system enjoy the vigor of a healthful organic action.

Tight lacing impairs the action of the stomach and intestines, impedes the motion of the heart and lungs, and in short will more or less affect all the vital functions. This naturally produces feebleness, indigestion, costiveness, obstruction, coughs, consumptions, and many other complaints.

The palid victims of this practice, have recourse to rouge and paint brushes, to put on the fading cheek, the mimic semblance of health; but the disgusting cheat can not secure a vigorous constitution, nor revive a declining one.

The Spartan mothers, in token of devotion, brought their children to the altar of Diana to be scourged! but the votaries of fashion, in the excess of their devotion, sacrifice ease and health, to gain one smile from the sickle Queen!! Sincere indeed, must that devotion be at Folly's shrine, which wilfully destroys health, and abridges the period of existence, merely to win the distinction of being a lady of fashion.

SECTION VI.

OF CLEANLINESS.

PERSONAL cleanliness is too important to health, to be overlooked in a treatise on the art of preserving it. Cleanliness of the body, is to be effected by changing the dress at proper periods, and by washing its surface. When this is neglected the perspirable matter, dust and so on, collecting in the clothes, and on the skin, destroys its liveliness, renders it rigid, and will more or less, obstruct the cutaneous transpiration. But changing the dress frequently, and cleansing the skin by washing, rubbing, bathing, &c., removes all the putrescible perspirable matter, and other filth; and promotes both perspiration and circulation in the extremities, by keeping the skin pliant and lively. Those who perspire a great

quantity, require a more frequent change of dress, and washing of the skin than those who do not. When the clothes are impregnated with the perspirable matter, they emit a disagreeable fœtid smell; and this is an admonition that the clothes ought to be changed and the skin washed.

Some, from a peculiarity of constitution, are inclined to have moist feet, particularly in warm weather. The perspiration proceeding from them gives out a very offensive odor;—the proper treatment for them is to change the socks, and wash the feet every day in cold water. This will be found both a convenient, and a salutary means of preventing such unpleasantness.

Particular attention should be paid to cleansing the teeth and mouth. When this is neglected, the mouth becomes foul by the putrescence of the particles of food, that settle about the teeth; and this taints the breath and injures both the gums and the teeth, by incrusting them with tartar. A diseased filthy mouth not only taints the breath, but will in time affect the stomach. Due attention to cleansing the mouth will prevent this offensive, unpleasant result. When a habit of cleanliness is once established, the feelings of the person will give sufficient indication of what is proper in this respect.

Our attention to cleanliness ought to extend to our houses, kitchens, yards, &c. For, it is evident, that many diseases of a malignant, contagious kind, are generated by breathing the unwholesome air, infected with miasma or noxious effluvia, rising from the filthy and decaying substances about our houses, kitchens, sewers, yards &c,

SECTION VII. OF AIR.

In a foregoing section, we have had occasion to speak of air, so far as its instrumentality, in sustaining vitality is concerned. It is here introduced, that its influence on the health of the system, may be considered.

Air is not a simple element, as most unlettered persons suppose; but, in its purest state, is composed of at least three different kinds of gases namely, oxygen, nitrogen or azote and carbonic acid. Chemical experiments instituted to ascertain the relative quantity of each of these gases, that enter into the composition of the air, have given a slight difference in the results; this, perhaps, was occasioned by the different degrees of accuracy employed in making the experiments, or by the different states of purity in the air subjected to trial. The latest experiments we have consulted, set down the quantity of oxygen by volume, at a little over one fifth, and that of nitrogen, at a little under four fifths, and that of carbonic acid, at one hundredth, that is one part in a hundred.

Besides these, there are other gases, exhalations and vapors that are sometimes found in the air; but as they form no part of pure air, they are considered as accidental mixtures. And some regard even carbonic acid, as an accidental property, and not as forming any essential part of pure air.

Oxygen is sometimes called vital air, because it is the principle that supports life. Without this property, air is incapable of supporting combustion or sustaining life; yet the relative quantity of oxygen and nitrogen, has been wisely regulated by infinite Wisdom. An atmosphere of pure oxygen would promote combustion so rapidly, that a candle would disappear in a minute or two, and even our iron candle-sticks would take fire and burn up. It has also been ascertained,

that, although nitrogen alone, is destructive of life, yet the exact proportion in which we find it combined with oxygen in the air, is the best adapted to our well being.

But as we are not aiming to write a scientific treatise on the nature and properties of air in general, we will confine our observations more particularly to those circumstances by which the health of the body is affected.

The atmosphere becomes corrupted, and consequently pernicious to health, either by losing its oxygen, or being impregnated with various mephitic gases or noxious vapors. The respiration of men and animals, and the burning of so many fires, whether natural or artificial, destroy its oxygen; and the decomposition and putrefaction of innumerable substances, both animal and vegetable, load it with effluvia pernicious to health, and frequently fatal to life. Had not the all wise Creator provided adequate means for disinfecting and renovating the air, it would, in a short time, become entirely unfit for the purpose of respiration.

Some ingenious experiments made by Dr. Priestly, led to the important discovery that air disoxygenated by the breathing of animals, was in a short time renovated by the vegetation of plants. Most plants, in a state of vegetation, have the property of renovating air that has lost its oxygen, if exposed to the light of the sun; but during the night, or in the shade, they emit impure air. The quantity of pure oxygen, however, produced by the green stalks and leaves of plants when exposed to the influence of the sun, during the day, exceeds the quantity of impure air emitted by the same plants during the night, by more than a hundred fold. This is one means by which the waste of oxygen, constantly taking place, is supplied. For this reason, no doubt, the air of the spring season, is more salubrious than that of autumn, which is impregnated with impure exhalations. Fevers, and inflammatory complaints are more common in the fall, than in the spring.

Nitrogen is lighter than the atmospheric air, and consequently will tend to rise into the upper regions of the

atmosphere, and is there oxygenated, and restored to pure air by the discharge of the electric fluid, that takes place when it thunders.

Air is apt to become infected in deep wells, damp cellars and other confined places. Many persons have instantly expired by going down into wells, where carbonic acid gas had settled at the bottom, or some other mephitic gas had collected in it. Caution ought to be observed by persons intending to descend into a well, to remove all noxious gases before they enter. It may readily be ascertained whether any such gas has collected in a well, by passing a lighted candle slowly up and down a time or two suspended by a string; if the candle does not go out, the well may be entered with safety; but if it does go out, to enter the well will be at the hazard of an instantaneous loss of life. The noxious air may be removed from the well, by attaching a long pipe to the nozzle of a bellows, and blowing strongly for a few minutes.

Newly painted rooms likewise emit some mephitic exhalations, that are pernicious in a high degree, particularly to those predisposed to weakness of the lungs or breast. A newly painted room should not, therefore, be occupied until it is disinfected. Chloride of lime, (that is slaked lime impregnated with a gas called chlorine,) dissolved in water and sprinkled about the room, rapidly removes the noxious effluvia, and purifies the sources from which they issued. Cellars, jails, hospitals, slaughter-houses, &c, or any other place infected with the miasma arising from animal or vegetable putrefaction, may be purified by the use of the same article, either in state of solution, or in a dry state. We have recommended this article because it is cheap, and upon the whole is the best disinfecting agent we are acquainted with; and we think that people in towns and cities, where there are so many sources to produce infected air, would do well to use it.

Warm stove rooms, though very pleasant so far as temperature is considered, are by no means to be regard-

ed as being as healthy as rooms warmed by fire in a chimney. Such rooms, are generally too close to admit a free circulation sufficient to carry off the vitiated air, and yield an adequate supply of fresh air. Both the heated stove, and the act of breathing vitiate the air; and if there are many persons in the room, they will in a short time, feel languid and feeble, and unless fresh air is admitted, the result must be fatal.

Rooms warmed by a fire in the chimney, are more congenial to health; for all the air vitiated by the process of combustion, is carried off up the chimney. And there is a freer circulation in such a room, than in a stove room; for the continual ascent of air up the chimney, makes room for fresh air, which is constantly forcing into a room, where there is a good fire, at every small opening. This keeps the air in a state of purity to a good degree.

Churches, and all public rooms that have been closed for some time, should be well ventilated an hour or two, before the people collect; and should then admit a sufficiency of fresh air to answer the purpose of respiration; for so many persons together soon corrupt all the air in the house. Many persons, in crowded rooms, not well ventilated, have by breathing a corrupted air, become languid, and sick, and some have fainted.

A young disciple of Esculapius, not many years since, made one of a pleasure party, that met in a close room, where many suffered severely the consequence of breathing the noxious air. Not long after, in conversation with another physician, he complained loudly of what he suffered in that *vile oven*; and expressed his determination of cautioning the public against the pernicious effects of such assemblies in close rooms. "Let them alone doctor," said his more crafty Esculapian fellow, whose heart was more alive to motives of self interest than those of humanity, "how else should so many doctors live in one town!"

The following afflictive circumstance, affords a most melancholy confirmation of the fact, that close crowded

rooms are not only pernicious to health, but often fatal to life.

The British settlement in India, near Calcutta, was attacked by the natives, under command of the viceroy, Rajah Doulah, in the summer of 1756. The little garrison, after an obstinate resistance, was forced to surrender themselves prisoners of war, the Rajah having given a most solemn promise of honorable treatment. But the monster had no sooner gotten the quiet possession of their arms, than he violated the pledge of good faith; and utterly regardless of the principles of honor, the dictates of humanity and the treatment due a brave enemy, he barbarously drove them all into a dark, shallow vault under ground, significantly called the *black hole*, being only eighteen feet square. The number of unfortunate soldiers, thus inhumanly immured, was one hundred and forty six, with their gallant commander, Colonel Holwell. Only two small windows, obstructed with iron bars, admitted air into this filthy vault. Covered with sweat and dust, when crammed in, on a hot sultry evening, the sweat soon became most profuse; and as the body was drained of its moisture, their thirst grew insupportable. The acrid perspirable matter evaporating and mingling with the air vitiated by so many breaths, soon rendered it unfit for respiration; and now their sufferings were indescribable, until released by death, and such release many of them soon obtained. Before the barbarous wretches, that penned them there, could be prevailed on to remove them, *one hundred and twenty-three*, had perished! Other examples might be adduced; but let this suffice.

Warm air, generally affects the aged and infirm, as it tends to relax the body, and produce a more rapid circulation of the fluids. Extremely cold air renders the fluids stiff and viscid, and readily disposes the blood to canker and inflammation; hence originate stiches in the side, pains, rheumatisms, inflammatory sore throats, &c. Attacks from this catalogue of disorders, may generally be obviated, by preserving a proper temperature of the body.

Damp or moist air, relaxes and debilitates the body, retards the circulation, checks the perspiration, and depresses the spirits. If it is accompanied with cold, it obstructs the perspiration, and throws the retained humors on the breast, throat, stomach and bowels, occasioning sore throat, pleurisies, sick stomach, diarrheas, &c.

Dry air moderately cool, promotes the serenity and activity of mind; the elasticity and vigor of body; and may, therefore, be reckoned, the most salubrious both to the healthy and infirm.

Houses situated near lakes and ponds, or in low, damp situations, may be considered as unhealthy. Bed rooms, and sitting rooms, ought to be elevated above the mass of carbonic acid gas, that naturally settles near the ground. In large towns, this caution is more necessary, as this deadly air is copiously generated in them; and there is not vegetation enough about them to absorb it. Wet clothes should by no means be kept in dwelling rooms, as the damp vapors arising from them are particularly prejudicial to health.

SECTION VII.

OF THE PASSIONS.

CUSTOM, the arbiter of language, has employed the term passion as a generic term, to denote all those emotions of the mind, produced by the operation of extrinsic causes. These emotions may very properly be divided into two kinds; those which enliven the spirits, accompanied with sensations of pleasure, and those which depress them, accompanied with sensations of an unpleasant or afflictive nature. The former, are the immediate result of the mind's perception of some desirable good either present or anticipated: the latter, the result of the minds perception of some fancied or real ill, either present or expected. Some metaphysicians think the for-

mer emotions ought to be distinguished by the term affections, and the latter only, by the term passions; but the distinction does not possess that degree of importance and propriety to secure a general adoption.

The passions appear to be the active forces of the soul, roused to action by the influence of extrinsic causes, that is, causes that do not exist in the mind. They are the *wind* and *fire* of the moral world, productive of important beneficial results, while moderation marks their operation; but when they rise to undue violence, or deviate from their proper course, their path is marked with desolation and misery.

But as we do not intend entering into a general or scientific dissertation on the passions, our remarks will be principally confined to their influence on the physical system. For it is a well established fact, that the proper control and direction of the passions is not only of the highest importance to peace and happiness; but is of equal importance to a healthy action of the system.

Those of sanguine, choleric constitutions suffer more severely from violent passions, than those of a cool, deliberate or phlegmatic disposition. The inordinate indulgence of passion, frequently induces disease of a formidable, stubborn character, by disturbing digestion, enfeebling the circulation, affecting the brain and nervous system, producing delirium, &c. &c.; and on many occasions, sudden gusts of it, have instantly terminated existence itself. It may be observed, as generally true, that diseases which have their seat in the passions, are more obstinate, and difficult of cure, than those produced by irregular or violent corporeal action.

The early management and control of the passions, by a proper education, is the best guard against their mischievous effects at any after period of life. When the habit is once established, their control then becomes comparatively easy; but when the curb of piety, reason or habit, is not put on them, the ordinary excitements of

unexpected circumstances, spurs them into a gallop. When passion reigns, reason is dethroned; and the individual driven by the wild storm of passion, can no more be controlled by the helm of reason or discretion, than a ship, before the driving tempest, with full sails, can be guided without a rudder. Should the vessel be so fortunate as to escape wreck, the raging tempest, will doubtless strain the joints and spring a leak.

The effects of the principal passions upon the physical system will claim a distinct consideration; and we shall first notice the enlivening ones, by some called affections.

OF JOY.

This is an emotion of soul noting a high degree of pleasure, excited by the attainment or possession of some desired good, the reception of good news, &c. &c. It is a vivid sensation of delight in the soul, awaked by the most important events in life, that are calculated to create a happy condition of the mind. Every pleasing object that surrounds us excites a pleasant sensation with, in us, more or less, vivid, according to the capability or power of such object, to awaken such sensations which is generally in the ratio of the value or estimate we place upon them. Hence, there are different degrees or modifications of this emotion, as delight, gladness mirth, cheerfulness, and the like; but joy is pleasure at *high tide*. Delight, likewise, denotes a high degree of pleasure, and springs from an exercise of the affections or understanding; gladness is inferior in degree to either joy or delight; it springs from being relieved, from some trouble or distress, but joy and delight imply not only, relief from distress, but also, the presence of some object that gives pleasure. Gladness springs up on ordinary occasions, when relieved from what troubles or disgusts us, or when we escape what we dreaded; it is a more tranquil feeling than joy or delight, and is in this re-

pect akin to cheerfulness. Mirth is a light, transient emotion of pleasure, which is excited, not so much by the enjoyment of any valuable or desirable object as by something diverting, as wit, drollery, buffoonry, grotesque gesticulations, &c.; it generally displays itself, in laughter and noise of different kinds. Cheerfulness is rather the effect of a habit of making one's self pleased with himself and all around him, than a passion. It is a state of mind extremely favorable to health; and is the very essence of contentment. The possession of genuine piety is the best security for that unruffled flow of cheerful spirits, which is not disturbed by every adverse gale.

But, we crave the readers pardon, we have, almost insensibly slidden into a metaphysical investigation of this passion, and its kindred emotions. We hasten now to make reparation, by entering forthwith upon the consideration of its influence on the physical system.

Joy and all its kindred emotions, exercise a salutary influence on the body;—enlivening the activity of the whole organic machine;—giving vigor to the action of the heart and arteries;—rendering the circulation free and uniform. Hence, this state of the mind is not only favorable to the enjoyment of health; but contributes in no small degree to its recovery, when the body is wasting under general debility, or nervous depression, as it tends to promote the healthy action of the vital organs.

Excessive and sudden transports of joy, however, have, in many instances, produced the most alarming, and even fatal consequences. It is sometimes more inimical to life than its opposite, grief. Sudden transports of this passion, frequently, unstring the muscular energies, and suspend vital motion; and in some instances, the most skillful efforts to rekindle the vital spark, have proved unavailing. Persons of an ardent, lively temperament, and of delicate, nervous sensibility, are more liable to suffer serious or fatal consequences, from sudden transports of this passion. Pains ought, therefore, to be taken to prepare their minds gradually to meet its

emotions; and by this means its dangerous effects will be obviated.

The door-keeper the of house of congress, on hearing the news of lord Cornwallis' defeat and surrender, was so overcome with the emotion of joy that he fell down and instantly expired.

It would be easy to enumerate instances, in which the sudden excitement of this emotion, raised the tide of pleasure so high, that it drowned the wheels of life; and produced either a temporary or perpetual suspension of their motion.

One instance of a temporary suspension of vital action, we beg leave to add, as we were an eye witness to the circumstance.

The amiable wife of the Rev. S. D. jun., of Greene county Ten., was a lady of extremely delicate sensibility, possessing ardent and sincere affection for her husband. When business called him from home, even for a few days, she generally experienced the depression of sorrow, at his departure, and the enlivening influences of joy at his return. On one occasion, ecclesiastical business required his absence for several weeks longer than usual; and what rendered the effect still greater, he had to go several hundred miles. It is a fact, of which all perhaps, are conscious, that we more sensibly feel the absence of those whom fond affection make essential to the felicity of the domestic circle, when we know that they are at a great distance from us. The day, he returned home, she was at church; during a short intermission between sermons, she was standing under the shade of a large tree near the house, conversing with some other ladies, and amongst other things; she spoke of the absence, and the expected return of her husband that day or the next, at farthest. While she was yet speaking, one of the company, exclaimed, "Yonder he comes now!" She hastily turned her head, saw him at no great distance from her, and instantly fell, motionless and senseless, to the ground. Efforts, however, to revive her, in a few minutes, proved suc-

cessful, though great debility remained, from which she slowly recovered.

Mirth, as before observed, is a modification of joy; and when moderately indulged, is by no means unfavorable to health. Laughter is the ordinary mode of expressing this emotion of the mind; and when indulged in moderation, it promotes the circulation of the blood through the lungs, and increases the energy of the nervous system; hence it has a salutary effect in relieving pains in the stomach, obstructed circulation, and nervous debility. Instances are found on record, of persons expiring in fits of excessive laughter. A melancholy proof of this fact, was realized by a young barrister of promising parts, in the upper end of this state, who in a fit of laughter, ruptered a vessel in the lungs, which in a short time produced his death.

"Askew, a wealthy and facetious farmer of Cornwall, was afflicted a with most alarming imposthumation, of which he appeared to be on the very point of suffocation. His ungrateful, thievish servants, concluding from their master's agonies, that the period of his dissolution had come, began to plunder. One treated himself to his master's gold watch, another laid violent hands on the silver plate, and a third still more daring broke open the bureau, and began to singe his gold, with which he soon replenished his own empty pockets. A domestic monkey being present, witnessed this play of every one help himself; and prompted by the principle of imitation, he concluded to take a hand in the game. Laying hold of his master's wig, he applied it to his head; and then gathering his gold-headed cane, politely made him a low bow, and began to strut about the house as a buck of great consequence. The stately steppings, self assumed dignity, and grotesque antics of Jacko, wrought so powerfully on the fancy of Mr. Askew, as to excite an immoderate fit of laughter.—The imposthumation broke, the purulent matter was thrown up—and, to the utter confusion of the pilfering crew, he perfectly recovered his health."

OF HOPE.

This pleasurable emotion of the mind, is excited by the anticipation of some desirable object considered attainable. It is always accompanied with a sensation of pleasure, in a greater or less degree, according to the value of the object, and probability of obtaining it. Joy may be considered, the freshet or spring tide of pleasure; —hope is pleasure flowing gently within its banks. It is constantly mingling some sweet to diminish the bitterness of misery's full cup. It is the first friend that offers solace to the sons of affliction;—it is the last to forsake them. It sheds a ray of light over the dark path of adversity; and promises health to the sick; prosperity to the unfortunate; success to enterprise; wealth to industry; victory to courage; and titles, honors and crowns to aspiring ambition. As it deals in future blessings it always tells a flattering tale, and paints with fancy's bright colors, the image as it would have it; and moulds the pliant future into the most desirable shapes: 'tis a source from which the most forlorn and wretched, even to the most prosperous, derive pleasure. Without it, how truly wretched would existence be to most persons!

Hope is attended with all the favorable effects upon the health of the system, that joy is, without producing any of the serious consequences that excessive joy does. It buoys up the spirits, increases vital action; and is, therefore, an important auxiliary to effect a cure, when it can be excited. A remarkable case of its salutary influence, in the cure of disease, is recorded in the history of the notable siege of Breda, 1625, by a physician, an eye witness to the fact.

The citizens of Breda, from a long siege were doomed to undergo all the miseries that fatigue, bad provisions, and distress of mind could bring upon them. The scurvey breaking out amongst them, carried off great numbers. This so enfeebled and dispirited the garrison,

that they were inclined to surrender the place into the hands of the enemies. The Prince of Orange, being anxious to save the place, and at the same time, unable to relieve the garrison, contrived to introduce letters addressed to the men, promising speedy assistance. These were accompanied with newly discovered remedies for the scurvey of a most extraordinary price, but possessing still more extraordinary virtue. Each physician was supplied with three small phials, filled with a tincture of such sovereign power that four drops were sufficient to impart a healing power to a gallon of liquor!

The physicians now began to deal out their *wonder-working balsams*. All who had the scurvey flocked around them, to get their doses. A universal faith prevailed in the sovereign virtues of the remedy. Hope promised recovered health; and cheerfulness again lighted up every countenance. The effect of the delusion, was, truly so astonishing, that it would almost stagger credulity itself to give it credit. Some who had not walked for a month before, in a short time, were seen walking the streets perfectly cured; and others, who declared that every former remedy had only made them worse, recovered in a few days, by taking what they called their gracious *Prince's cure*.

The above singular case, shows what a wonderful influence the passions of the mind, have over the body. This influence is too often overlooked in the treatment of disorders. How ineffectual the operation of mere medical remedies, when despondency preys upon the mind! And how wonderfully successful are the most simple means, when they have the mighty, concurrent influence of the imagination!

OF LOVE.

LOVE is a term of very extensive import; it generally denotes strong and passionate attachment, for the object that excites this emotion in the soul. Love is easily distinguished from friendship by the ardor of its operations; it is the master passion of the soul, exercising an uncontrollable dominion over all the powers of man, when kindled into ardor. When the bosom glows with the idea of requited love, it soothes each sense and sensibility of man; and presents to his eager lips, the purest draughts of facility that mortality knows. Pure, reciprocal love is one of man's most endearing delights—'tis the master passion that sways all his sweetest energies—is not wrecked by the storms of adversity, nor starved out by poverty—it hangs over each vicissitude of fortune—aids virtue in the last sad tasks of mortality—to cheer the langors of age and decrepitude—"explore the thought—explain the aching eye."

How sweet and powerful the influences of love! 'tis that which blends the interest and unites the hearts of lovers, and gives each the joys and felicities of the other. It induces the lovely delicate lady to leave the sweet home of childhood;—smile amidst poverty, heroically buffeting the waves of misfortune, and cheerfully toil with the husband she loves. No charm can so readily level the distinctions of birth or fortune, nor conceal the natural infirmities that mortality is heir to, as this. No pleasures are comparable to those that affect the heart, and none effect it with such exquisite delight, as this noble passion;—the most delicious feeling the heart ever knew, is virtuous love. 'Tis love, pious, ardent, deep and holy, that creates the bliss of heaven.

"Love studious how to please, improves our parts
With polished manners, and with winning arts.
It kindles all the soul with honor's fire;
Curbs and restrains extravagant desire;
A just heroic passion, that can find
No room in any base degenerate mind."

The influence of propitious love, is salutary upon the physical system, promoting all the secretions; enlivening the action of the heart; imparting vivacity to the spirits, & brightening the countenance with cheerfulness. But crossed or disappointed love, is often extremely hurtful. It depresses the spirits, enfeebles digestion, destroys the appetite, banishes sleep; and sometimes produces insanity.

Love naturally seeks the enjoyment of the beloved object; and asks not the aid of memory, nor the deductions of reason to prompt to the performance of whatever will please. The absence of the object of tender affection, generally produces an anxiety of mind, particularly, if the idea of danger is connected with it, that is often pernicious to health. If fate, or the will of parents, interdicts the enjoyment of the society of the object, which inspires the heart with the glowing warmth of undissembled love, the effect is equally pernicious to health:—the depressed spirits, the wan cheek, the heavy load of pensive sorrow, all bespeak the deleterious and fearful effects of baffled love, in drying up the fountains of felicity, and crushing the energies of vitality. Separation from the object of affection by death, often for a time, produces results equally hurtful; but kind Providence has so constituted us, that time wipes away the tears, and soothes the sorrows of bereavement; and that object being utterly removed from the shores of time, and consequently beyond the reach of the tender offices of love, the mind becomes resigned, or yields to the influence of new attachments.

But, if love is crossed or disappointed by the inconstancy, or falseness of the beloved object, it then not infrequently begets jealousy or turns to rage, revenge, or despair, producing some of the wildest storms of passion, that infest the seas of life, wrecking both happiness and health.

"Earth has no rage like love to hatred turned;
And hell no fury like a lover scorned."

We have now, briefly noticed the influence, of some of the principal, enlivening passions, upon the system. Our attention will next be directed to the effects of the principal depressing ones.

OF FEAR.

FEAR is a sensation of pain produced by a prospect evil; and is kindly given to man as a sentinel for self-preservation. Apprehension, dread, &c, are modifications of the same passion. We apprehend what is *possible*, fear what is *probable*, and dread what is *certain*; thus, the condemned criminal dreads the day of execution. Fear and apprehension, induce us to take measures to avert, if possible, the apprehended ill; but dread with wretchedness expects the unavoidable calamity.

Fear is not without a salutary influence in society, amongst those who are not governed by the principles of virtue. The fear of reproach, and the fear of condign punishment, often restrain the hand of violence, injustice and oppression; it also unties the purse of avarice and prompts to many worthy deeds that else had not been done.

Like every other passion it is liable to excess; and is then hurtful both in a moral and physical point of view. It takes from man, reflection, resolution, and judgment; and degenerates into base cowardice. To avoid this unmanning result, fear should not be allowed to have any other influence than prompt us to cautionary means to ward off the stroke that could be averted; and then,

With manly fortitude endure
The evil, which prudence could not cure.

Cowardice is in a good degree the effect of education and habit. Its foundation is often laid in impressions made in tender years, that are never completely rooted up in manhood. All the dismal stories of witches, fairies, ghosts, hobgoblins, raw head and bloody bones, and the

like, are well calculated to make children timorous and cowardly, and the dastaadly feeling becomes habitual, and not easily shaken off in maturer years.

One of the best remedies against torturing fear is a good conscience, void of offence to God and man. It will secure us serenity amidst all the calamities of life; and prepare us to meet the shock of any adverse accident. "Conscience" says Shakspeare, "makes cowards of us all."

"Thou mysterious pow'r,
That dost inhabit us without our leave;
And art within ourselves, another self,
A Master self, that loves to domineer,
And treat the monarch frankly as the slave;
How dost thou light a torch to distant deeds;
Make the past, present and future frown;
How, ever and anon, wake the soul,
As with a peal of thunder, to strange horrors!"

Fear generally impairs the vital energies, and instances are not wanting, in which, a sudden and excessive fright has literally destroyed life, by a total suspension of vital action. Fear and anxiety are well calculated to make disease more stubborn; and thus bring about the very thing dreaded; viz: a fatal termination of the disorder.

Many suffer their minds to be filled with distressing apprehensions of the fatality of their complaints, which operate so powerfully as to attenuate the vital thread; and the hopeless patient, falls a victim to the enervating power of his own imagination.

It has long been a matter of observation, that those who suffer under apprehensions of taking any epidemic complaint, are more likely to take it, than those remarkable for courage. This passion, impedes the circulation, disorders the stomach and bowels, enfeebles vital action, and thus increases the liability of the system to be affected with the contagion.

Man

Ingenious to torment himself,
Grows pale at hideous fictions of his own;
Through fear of dying, suffers many deaths.

Different effects have been produced, by excessive fear, or sudden fright, on different individuals, and even on the same individual under different circumstances. Sometimes it chills the blood, producing shivering with a sensation of coldness; and completely takes away the power of action. At other times, it has cured some chronic diseases; and imparted the power of vigorous active exertion to invalids that had not been able to walk for months.

A gentleman who had been afflicted many years with gout, and unable to walk, even with the aid of crutches, on hearing an alarm that the house was on fire, and fearing that amidst the general confusion he should be left amidst the ruins, sprang up and ran out with agility; and to his astonishment was entirely relieved for a time, from all symptoms of his complaint.

An English officer of great courage, from long service in India, had become afflicted with asthma, which induced great bodily debility, so that he was unable to draw his sword or walk six yards to save his life, as he thought. While thus afflicted, the alarm guns were fired for the whole lines to turn out, the enemy having broke into the camp. Knowing that instant and certain death would be his portion if he stayed in his tent, he sprang out with an alacrity that amazed his attendants, mounted his horse, and drew his sword with ease, although, he had the day before, employed all his strength in the attempt, and could not move it from the scabbard. His debility and asthma fell together, the instant the alarm was given; nor did his disorder return for some time.

On some occasions fright has so operated on the individual, as to change the black hair of youth, into the hoary hair of old age.

A young Spaniard of noble birth, was smitten with the charms, of a beautiful lady of royal blood, whose tender bosom was fired with a mutual ardor. The difficulties that courtly customs threw in the way, and the restraints imposed upon them by unfeeling parents did not damp

the ardor of their affection; but rather supplied fuel to the smothered flame. They met under the shady boughs of a tree in the king's garden, to enjoy in private, that luxury of social conversation, which the will of others interdicted.

The barking of a little dog betrayod them, and ended their pleasure.—It was a capital crime to be found in that place. He was seized by some of the king's guard; dragged to the bar, and conedmned to die. He was so terrified at the occurrence, that his hair turned gray that same night. The jailor, moved at the sight told the circumstance to the king as a prodigy; and the king thereupon pardoned him, saying, “He had been sufficiently punished for his fault, seeing he had exchanged the flower of youth, for the hoary hairs of old age.”

OF GRIEF.

This distressing emotion of the mind is produced by the suffering of some calamity, or by sustaining the loss of something that contributed to our happiness; and the intensity of the passion is generally proportioned to the estimate we place upon the thing lost, or the weight of the calamity endured. *Grief* is a deeper and more pungent sensation of distress than *sorrow*; the latter is produced by disappointments and a variety of untoward circumstances that perpetually arise in life, and does not affect us so deeply nor so permanently as the former.

Grief like a poison corrodes the mind, and wastes the body; it affects the nervous system, enfeebles the circulation, impairs the digestive powers, produces obstruction and other distressing complaints. Against the fatal effects of this passion, neither the internal nor external application of medical remedies avail anything. A copious flow of tears, generally lessens the load of grief, and ought not therefore to be restrained.

We deem it wide of our purpose to enter here into an

extended speculation on the concurrent causes, that render the susceptibilities of feeling greater in one individual than another. The most that science has been able to ascertain on the subject, is that similar causes of grief, produce different degrees of it, in different persons; but whether this results, from a different formation or organization of the brain; or from the different degrees of hope, these individuals may have, is not satisfactorily known. Possibly both these causes have their influence; and for aught that science, has yet ascertained in the operation of the laws of the mind, other causes may contribute to the same effect. At any rate we are ready to acknowledge, that any thing we have ever seen on the subject, is little better than wild fancy, perfectly unsatisfactory.

Grief indulged, often becomes settled melancholy, and sometimes produces insanity. Those under the influence of this passion, should not indulge themselves to brood over their sorrows, lest the waves of affliction overflow the soul. The mind should be actively employed in business or amusement, to divert it as much as possible from dwelling on the cause of grief. The best remedy, is to seek in piety those unwithering consolations, which can sustain the mind under the severest strokes of adversity. From this source issue streams of living pleasure that cannot be dried up by the occurrence of disastrous events.

Grief indulged, deepens the streams of sorrow, by employing the busy, anxious thoughts to con over the loves, friendships, hopes, and dear remembrances of past happy moments. Such reflections, though accompanied with a kind of melancholy pleasure, serve rather to awaken the mind to a greater sensibility, than to assuage its anguish. Among the many causes that excite the passion of grief, few perhaps, overwhelm the soul so deeply with the waves of anguish, as bereavement.

“Among the tombs she walks at depth of night,
In miserable garb of widowhood.
Observe her yonder, sickly, pale and sad,

Bending her wasted body over the grave
Of him who had been the husband of her youth.
Numerous were her sighs, her tears profuse;
For he she lost, was lovely, and loved her much:
Fresh in her memory, fresh as yesterday,
Is yet, the bitter day he died.
The man she mourns was affection's all;
The music of her ear, light of her eye;
Desire of all her heart; her hope, her fear;
The element in which her passions lived.—
Night after night, she wears herself away—
A mere shadow, so worn with speechless woe.
The tread of hasty foot, passing so late,
Disturbs her not; nor yet the roar of mirth,
From neighboring revelry ascending loud.
She hears, sees naught; fears naught;
One thought alone, fills all the heart and soul;
Uttered by silence, and tears alone—
The awful language, eloquent of deep affection.
Nor long shall she visit that place of skulls;
Her unsubstantial, withered frame, scarce,
Obstruction presents to the nightly breeze,
Like winter's barren, leafless boughs."

Disease produced by grief can not be cured by mere physical means;—means must also be employed to remove the anguish of the heart, otherwise medical efforts will be in vain.

"Thou must minister to the mind distressed,
Consolation's balm, sweet, efficient cordial;
Pluck from the memory the rooted sorrow;
Rase out the written troubles of the brain;
And, with some sweet oblivious antidote,
Cleanse the stupefied mind of the poisonous grief
Which weighs upon the heavy heart."

OF ANGER.

ANGER is a sudden emotion of displeasure, excited by the reception of some supposed or real injury, offered either to our persons, characters, or rights. The inten-

sity of this passion does not depend entirely upon the magnitude of the insult received; but also upon the pride or rather vanity of the individual, who receives it. When an individual, who possesses an exalted or overweening opinion of his own dignity and importance, receives an insult, his vanity like a magnifying glass enlarges it into the most aggravated injury, and uncalled for insolence; and consequently his ready resentment will equal the supposed magnitude of the offence.

Intense anger is one of the most ungovernable passions in the human breast: it drowns the voice of prudence, dethrones reason; and prompts to deeds of rashness that lead to the prison, and even the gallows; or it mingles for daily drink, the bitter cup of remorse. This passion, although turbulent as the storm while it lasts, is usually of short duration. When the mind broods over an injury, seeking occasion for revenge, it is then called *resentment*; and is associated with a dislike for the offender. The resentment of injuries to a certain extent, is, perhaps necessary and justifiable in human society, to protect our private rights, and impose restraint upon violence and insolence. But in the fullness of self-estimation we are too apt to step beyond the mere protection of rights, and restraint of violence and insolence; and indulge a spirit of revenge contrary alike to the precepts and spirit of christianity. Few things contribute so largely to the destruction of peace of society as the indulgence of this passion; and the more it is indulged, the readier it is kindled into a raging flame which neither prudence nor reason can control. It is a tempest, which often lashes the sea of life into fearful rage, making frequent wreck of happiness and even life itself.

“Pale and trembling anger rushes in,
With faltering speech, and eyes that wildly stare;
Fierce as the tiger, madder than the seas,
Desperate, and arm’d with more than human strength.

Anger generally affects the nervous and muscular system; and the pulsations of the heart are carried on with increased rapidity. Sometimes, in great storms of this

passion the blood is driven so rapidly and forcibly, that hemorrhages are produced both from the head and lungs, by rupturing some of the delicate vessels; and appoplectic fits are often produced by a too great determination of the blood to the brain. It often affects the stomach and bowels. In some vomiting is brought on; in others the bile is poured so copiously into the intestines as to produce purging.

Anger is a short lived insanity, producing the ~~rashest~~, maddest deeds of folly. The exercise of patience under injuries is not only a duty, the performance of which prevents all the deleterious effects of anger; but it is an infallible mark of a great and dignified soul.

Plato on one occasion, requested his friend Xenocrates, when on a visit, to correct his servant for him, as he was not at that time so fit to do it, as he was in a passion. At another time he said to one of his disobedient servants, "that he would beat him sufficiently, but that he was angry."

Sir Walter Raleigh, a man of noble mind, and known courage, has left an example of patience, and command over the passions rarely met with. A rash, hot-headed youth, at one time, treated him insolently in public, and then challenged him; and on his refusal to notice the challenge in any other way than with contempt, he spit upon him. Sir Walter taking out his handkerchief, calmly made this remark: "Young man, if I could as easily wipe away your blood from my conscience, as I can this injury from my face, I would this moment take away your life." The youth was struck with such a sudden and strong sense of the aggravated insolence of his behaviour, that he fell to his knees and begged the noble minded man's pardon.

Due attention to the formation of our habits, will readily bring this passion under the salutary restraints of prudence and reason; but if we suffer it to be blown into a flame on every occasion, it soon becomes ungovernable.

OF HATRED.

This detestable passion is a *voluntary* and deep-rooted dislike, that seems to have its seat in the angry passions of the heart. The passion denominated hatred can have no existence in a bosom, where malignant passions do not rancor: it is the voluntary fruit of a depraved soul, rather than the consequence of any adequate provocation; and hence it is a passion that ought to have no place, but in the bosom of fiends, and no outbreaking but in the chambers of darkness: Hatred is not contented with merely wishing evil to the objects of its rancor; but derives its only fiendish pleasure from their misery or destruction. The best of men are sometimes the objects of hatred on account of their very virtues; or their well intended admonitions.

A certain Italian, having the object of his hatred in his power, told him there was no possible way for him to save his life, but by renouncing his Savior. The dastardly wretch, afraid to die, and in hope of being spared, did abjure his interest in the merits of a crucified Savior. The other, immediately stabbed him to the heart, saying, with a fiendish smile, that now he had full revenge; for he had at once destroyed both soul and body. Could any demon from the pit of darkness have manifested a more fiendish malignity! Hatred is the bane of peace,—the ulcer of the soul; and cannot fail to injure the body.

“When hatred is in the basom nurst,
Peace can not reside in a dwelling so accursed.”

Rancor, malice, enmity, ill-will, and spite, are modifications of this base passion; they seek the misery, and are delighted with the misfortunes of their objects. Detestation, aversion and the like, are, when kept in proper bounds, allowable emotions of the soul, excited by actions or things, and are not personal feelings, directed against the object independent of its qualities. Detest is generally a laudable passion; thus we detest a traitor for his treachery; good men detest fraud, baseness, and

the like. Hatred is a very different passion: the object is not hated because it is odious; but, because, it interferes with inclination, indulgeuce &c.; thus bad men hate the light, because it makes their evil deeds manifest.

Hatred and envy cohabiting produced Slander, whose mouth is ever full of lies, of which she stuffs the ears of men.

"Slander, the foulest whelp of sin.

His tongue was set on fire of hell, his heart
Was black as death, his legs were faint with haste
To progeete his mischievous falsehoods.
From door to door you may see him speed,
Or placed amidst a group of gaping fools,
And whispering in their ears with his soul lips:
Peace fled the neighborhoods in which he made
His haunts; and, like a moral pestilence,
Before his breath, the healthy shoots and blooms
Of social joy and happiness, decayed.

The sigh of innocence reproached, his delight,
Broken friendships, and strife of brotherhoods;
And with appetite keen for scandal, greedily
He made most hellish meals of good men's names.
Stroye daily by a thousand means,
And oft succeeded to make virtue stink
In the world's nostrils, and its loathy self
Smell sweetly.—

The fool, and many too who credit had
For wisdom, grossly swallowed all she said,
Unsisted; and although, at every word,
Contradictions glaringly its falsehood bespoke,
Yet still they ran to hear her speak, and
To others the story with many sanctions told."

OF ENVY.

ENVY, one of the blackest passions in the human heart, is a sensation of uneasiness accompanied with malignity excited by viewing the superior accomplishment or advantages of a rival. The root of this passion is an overweening self-love and thirst of praise, desiring

to be esteemed more wise, learned, wealthy and so on, than others, without prompting us to use efforts to become so. It never seeks to excel a rival, but to degrade him to its own level.

Solomon says, "Envy is the rottenness of the bones." It is the bane of peace,—the canker of the soul, the fell worm that gnaws the root of happiness,—the enemy of vivacity and health.

Envious persons are ever blind to the virtues and accomplishments of others; but quicksighted in detecting imperfections, that none else can see. They with shrewdest glance can penetrate the secret springs of action, and in *Malignity's* philosophy can find some sinister motive for every virtuous act. Envy, like the buzzard, can smell nothing so readily, as a carcase; or like the fly, it seeks only the raw and corrupt parts of the body.

"What filled the heart of envy with gall,
Was worth in others, vileness in himself;
A lust of praise with undeserving deeds;
And conscious poverty of soul: and still,
It was his earnest work and daily toil,
To make the noble seem mean as himself.

— Whenever he heard,
As oft he did, of joy and happiness,
And great prosperity, and rising worth,
'Twas like a wave of wormwood o'er his soul
Rolling its bitterness. His joy was wo,
The wo of others. When, from wealth to want,
From praise to reproach, from peace to strife,
From mirth to tears, he saw a brother fall,
Or Virtue make a slip,—his dreams were sweet.
But chief with Slander, daughter of his own,
He took unhallow'd pleasure. When she talked,
And with her filthy lips defiled the best,
His ear drew near; with wide attention gaped
His mouth; his eyes, well pleased, as eager gazed
As glutton, when the dish he most desired,
Was placed before him; and a horrid mirth,
At intervals, with laughter shook his sides."
— "Put, sometimes too, beneath
The dust she raised, was worth awhile obscured;

And then did Envy with devils laugh.
O Envy! hide thy bosom, hide it deep!
A thousand snakes, with black, envenomed mouths,
Nest there; and hiss, and feed through all thy heart!

When man issued from the hand of creative energy, envy formed no part of his character; it had no existence in his mind. It was then known only in the chambers of darkness, and rankled in the bosom of fiends; it prompted them to meditate the ruin of mankind. It is the most fiend-like disposition that can find dominion in the human breast. Some of the blackest crimes that swell the catalogue of man's enormity, from original sin to the present day, have been instigated by this passion. Quickening the pace of slander, it turns a malignant eye on all the fair forms of truth, righteousness, peace, honor and happiness, and labors to blight them in its deleterious shade.

Moved with envy Joseph's brethren sold him as a slave into Egypt. Instigated by this passion, the Jews "put to death the Lord of life and glory;" for "Pilate knew that for envy they had delivered him." Most of the persecutions, that have stained the world with innocent and righteous blood were instigated by this diabolical passion, unwilling to bear a virtuous rival. What other passion, so fiend-like, could instigate the lords of the Inquisition toinge on their prey, and fawn on their vengeance!—quickening the limping pace of ingenuity to multiply expedients of torture, and forcing every stand that retiring humanity could make in the heart,—each emotion of tenderness and honor!—perpetrating cruelties that one would have supposed, was beyond the reach of human thought to devise, or malignity to execute!—"lower than perdition--blacker than despair."

Envy also, deservedly, punishes its possessor. "For wrath killeth, and envy slayeth the foolish one." "A sound heart is the life of the flesh, but envy is the rottenness of the bones."

"Envy commands a secret hand,
With sword and poison in his hand;
Around his haggard eye balls roll,
A thousand fiends possess his soul.
The hellish, unsuspected sprite,
With fatal aim, attacks by night.
His troops advance with silent tread,
And stab the hero in his bed;
Or shoot the wing'd malignant lie,
And female honors pine or die."

— "Malicious envy rode
Upon a ravenous wolf, and still did clew
Between his cankered teeth, a venomous lead,
That all the poison ran about his jaw."

OF AVARICE.

AVARICE is a sordid passion. It is a carking anxiety after property;—a rapacity in getting, and a tenacity in holding it. It is a groveling passion that seeks for happiness beneath the skies, and expects to realize, by hoarding up perishing dust, permanent enjoyments. When this sordid passion takes possession of the heart—farewell all sentiments of honor, all correct notions of honesty: the only rule of right, and measure of wrong with the miser is his own interest:—no other argument can reach his selfish soul.—Farewell to all natural affection, and all the obligations of gratitude;—it wrests the last drop of humanity from the bosom, and strips it of the last feeling of compassion. The shrill cry of justice, or the deep groans of want are notes equally beyond his compass. He can behold misfortune's most afflicted sons, driven by adversity's fiercest gales, wrecked on the ocean of poverty, with scarce a broken piece of the wreck, to buoy their heads above the waves of utter want, without one pensive reflection. Without a sigh, he can strip nakedness of its rags, and rob poverty of its crusts, or enter the forlorn cabin of the widow and exact the uttermost farthing, leaving her fatherless babes breadless.

Avarice unites the bonds of society, and robs the ~~mis~~ set of one of the greatest blessing of it;—the mutual communication of kind offices. It dries up the fountains of humanity, obliterates every sentiment of generosity, and freezes up every stream of sympathy. As soon may you expect to pluck the blooming rose under the frozen pole, as to find the warmth of affection in the miser's frigid heart. From a region so barren of virtue, men no more expect to reap the fruits of charity, than they expect to gather grapes from the thistle, or figs from the bramble.

This base passion robs the man of content; for although nature is content with few things, avarice is not content with *all things*. The miser has wealth in the same way that a sick man has the fever, it tyrannizes over him;—it tortures the soul, and wastes the body with carking anxiety. His thievish fancy hears in every sound the approach of the robber. Of all the sons of folly, who barter time for eternity, life for death, heaven for hell, none do it on easier terms than the wretched worshipper at Mammon's shrine, “who to the clink of Mammon's box gives most greedy and rapacious ear;”—’tis the only music can charm him. Avarice renders a man poor in the midst of wealth. His niggard soul can scarce allow a scanty supply of food and raiment to his body; and for fear of future penury, reduces himself to present utter want.

“And oh! what man's condition can be worse
Than his, whom plenty starves, and blessings curse?
The beggars but a common fate deplore,
The rich poor man is emphatically poor.
If cares and troubles, envy, grief, and fear,
Be the bitter fruits that fair riches bear;
If utter poverty grows out of store,
The old plain way is best,—let me be poor!”

Avarice is accompanied with extreme eagerness to make money, with distressing fears about keeping it, and with inconsolable grief for losing it; besides heart-aches, envies, jealousies, sleepless nights, wearisome days, and numberless other ills which it inflicts on its

slaves, ruining their health, and dragging them to the grave with some wasting malady, or hurrying them there by rash, horrible suicide.

A wealthy cotton planter in Georgia, in consequence of getting his cotton to market after it had fallen two cents on the pound, was seized with such a deep sadness of heart, that he forthwith took his bed, and refusing to be shirked, shaved, or supplied with suitable nourishment, died a miserable victim to grief, because he did not get the cream of the market. This wretched victim of avarice, was a bachelor, and his estate, on appraisement, amounted to nearly one hundred thousand dollars!

An old miser seeing a hoop or two bursted off one of the barrels in which his silver was hoarded up, was so smitten with grief at the expectation that the barrel was rifled of its contents, that he could not endure the burden of life, and by means of a rope slipped off the mortal coil, and rushed unclad forth into eternity, with impious haste to meet the righteous Judge; although the bursting of the hoop had been merely accidental, and not one cent of the idolized, shining mass had been removed.

We have now taken a brief view of some of the principal effects, of some of the principal passions upon the health of the system. We have not introduced all the passions; for there are upwards of twenty in all; nor have we like some late medical writers, labored to exhaust each subject introduced, to show what could be said on them; but, have merely traced the more prominent features, and pointed out the more obvious and deleterious effects upon the human system.

"Would you extend your narrow span,
And make the most of life you can;
Would you, when medicines cannot save,
Descent with ease into the grave;
Calmly retire like evening light,
And cheerful bid the world good night!
Let virtue and temperance preside,
Our best physician, friend and guide?"

CHAPTER IV.

OF DISEASE.

PATHOLOGICAL writers have flooded the world with theories, offered in explanation of the nature, effects and causes of disease, both remote and proximate. Far divergent, have been the paths, they traveled, and unsatisfactory has been the result of most of their speculative tours. Many of the professors that have figured on the arena of hypothetical combat, appear to have been more eager to show their dexterity in hewing down old systems, and their ingenuity in building up new ones, than to arrive at correct views of pathology. One of the leading defects in the old systems originates from this, the theories were first formed, and then the practice was adapted to it. He, that begins in conjecture, ends in uncertainty; and his effort to explain by theory, that which he had never entered into the school of experience to learn, serves only to add another stripe to the many-colored web of hypothesis. And to us, it appears strange, that, on such uncertain grounds, men will set themselves up under the pompous cover of a diploma, to tamper with things so sacred as life and health. It is impossible that the correct knowledge of the nature, effects and causes of disease, and the method of removing it, can be learned by reasoning *a priori*. This is a knowledge, that can only be acquired in the sure school of experience, by a careful, patient and untiring study of the lessons there taught. From this school were the data drawn, on which the theory of disease is founded, as laid down in this work.

Systems fraught with so much uncertainty and inconsistency, as many of those are, which have been taught

in the halls of medical science, would long since have withered before the breath of experience, had they not been protected by the authority of great names, and palmed upon the world under the sanctions of *learning*. But, however ingeniously, error may be gilt with learning's finest colors, it does not change its nature—it is error still; and because the authority of its patrons is sufficient to introduce it, independent of its merits, the world has long been imposed upon. A person unacquainted with the merit of the various theories, would be ready to conclude, that the multitude of explanations had rendered this dark subject clear as the cloudless sun-beam.

A young traveller, making a tour through Europe to see whatever could be seen, and learn what was there to be learned, was introduced by gentleman into a splendid library. Amongst the different inquiries he made respecting the merits of the various works that attracted his attention, he said, "What large books are these?" Said the librarian, "They are commentaries written on the Bible." "That book," replied the tourist, inquiringly, "Must have been very mysterious once, and very plain now, since so many volumes in folio, quarto, and octavo, have been written to explain it." "No truly," rejoined the librarian, "most of them have darkened counsel, by laboring to prove what they believed, instead of explaining what the Bible taught. They did not go to it to learn what it said, but to see what they could make it say."

So most theorists, have produced their elaborate schemes to prove their favorite whims, instead of explaining the phenomena of disease, learned by nicest observation, under all its different aspects. Hence it has resulted that this successive accumulation of theory upon theory, has not materially enlarged the sphere of useful knowledge, or improved the practice of the healing art. We do not wish to be understood as uncereemoniously, and indiscriminately reprobating all the theories as unmixed error: some valuable truths are found

In many of them, which have served as "beacons on the dark solitudes of time," to succeeding theorists. But these truths important as they were, had been associated with so many glittering errors, that the inquirer was often misled; and the value of the truth itself discredited.

The most distinguished medical theorists, of later times, are CULLEN, BROWN and RUSH, of the mineral school, and THOMSON, the father of the botanic school of medicine. And it is worthy of remark that the respective theories of all these great men, except THOMSON's, failed, or at least proved uncertain and inefficient in their own hands, when reduced to practice. How humiliating to the proud dignity of man that the darling fabric he has raised by years of toil should be sapped and overthrown by the stream of time, when hope had promised him that it should be a monument of immortality to his name, against which the waves of time, should dash in vain.

The contradictory schemes proposed and adopted, at different periods, as the standards of medical practice, and the inefficiency of each, clearly show that a false pathology, and a corrupt practice have pervaded each system from the origin of the science to the present day. Dr. Blane, in his medical logic says, "That the medical sceptics allege that the history of this pretended art in all ages, so teems with the fanciful influence of superstitious observances, the imaginary virtues of medicines; with nugatory, delusive, inefficient, and capricious practices; fallacious and sophistical reasonings, as to render it little more than a chaos of error, a tissue of deceit unworthy of admission among the useful arts and liberal pursuits of man." At another place, he remarks that the medical science, is "beset with every species of fallacy, uncertainty and doubt." Cullen condemns the corrupt practice of all physicians from Hippocrates to Stahl. Brown says he was constrained "with many eminent men, to deplore the healing art as altogether *uncertain and incomprehensible;*" that upwards of fifteen

years of his studies were passed, "like a traveller in an unknown country, wandering in the shades of night." Dr. Rush, a great and good man, lamented the instability of the theories, and the uncertainty of the practice of medicine. This uncertainty of the latter, and instability of the former, can be readily accounted for, it is because most theorists, depend more upon speculative notions, than the sure lessons of experience; and regulate their practice rather by theoretical rules, than by the ascertained effects of remedies.

This rigid adherence to theoretical rules, in some countries, is carried to its utmost limits. We saw an account, not long since that the physicians of Spain, were required to adhere to the prevalent theory, in their practice, at the expense of both life and character. When a physician in that country, is called on to attend a patient, he is compelled to prescribe according to the favorite theory of the country, although every day's experience convinces him, that certain death must result from such prescription. He must move in the old path, and not turn either to the right or left, even to save the life of his patient. Should he, following the light of experience and the dictates of judgment, give a prescription differing from that laid down in the prevailing theory of the day, and happen to lose his patient, a loss of his own life and character, is the unavoidable fate he must meet with; and if he succeeds in raising his patient, his life is at the mercy of the violated law. But if his prescriptions are according to the rules of the prevalent theory, he is pronounced a good doctor, although he should lose ninety-nine patients in every hundred.

DR. CULLEN's theory, supposed that all morbid or diseased action in the body, originated in some change in the state of the solids, produced by the nervous system. To correct these variations, was the primary object, at which his practice or prescription aimed, in the restoration of health. A desire to classify diseases after the manner of natural history, led him to load his system with all the absurdities of nosology;—to bewilder

the mind, confound the reason, and paralyze the efforts of the practitioner, with the intolerable folly of two thousand names of disease, with their symptoms, types and stages! Disease is but the departure of the system from a healthy action;—does it not bear absurdity on its very front, to talk of two thousand departures? There is truly, something very imposing in the classic lore, and scientific arrangements exhibited; but what signifies volumes of such learned lumber, where the matter of fact is lacking? 'Tis a mere balloon flight!—equally as wild and as profitless. Of this there is the strongest proof:—his elaborate system failed, utterly failed, when reduced to practice, even in his own hand:—art, learning, scientific arrangement, all could not make it efficacious. His system has not only the appearance of learning, but is truly learned; it exhibits great refinement and cultivation of mind. But his active mind overlooked the most obvious and important facts, in its eager grasp after some distant, unknown discovery. A proof this, that it is easier to speculate than to try experiments; to found a handsome system on hypothesis, rather than on observation; and that his knowledge of the nature of disease, and the efficient mode of curing it, bore no proportion to his science:—he was much more a philosopher than a physician, and could discourse on Newton's principles more correctly than therapeutics; and trace the motions of the planets, better than he could point out the nature of disease, and the successful method of removing it.

Dr. Brown's theory assigned two causes for the origin of disease: viz: excess and deficiency of stimuli. Those arising from the first he called *sthenic*; and those from the last *asthenic*; and his mode of cure was to produce a contrary state. It is certainly a strange idea that disease could be produced by an excess of vigor, at least as soon as it takes hold of the system, the cause must cease, for a vigorous and a diseased state of the body can not possibly exist at the same time. In fact this notion is incompatible with his system of the living power; and

we are surprised that the discriminating mind of Brown should be betrayed into an inconsistency so glaring! The notion that there is or may be an excess of vigor, is equivalent to saying that the power of life may be in excess;—a circumstance which is impossible in a state of health, and in a state of disease it would be much more so, if the theory of life laid down by Brown be true, and we presume it is not far from truth. We have nothing particular to object to his asthetic class of disease.

Dr. Rush's theory regards disease as an unit, and accounts all a state of morbid excitement, which, like Brown, he considers either as excessive or deficient. His mode of cure was, therefore, to equalize the excitement by stimulation or depletion, according as he regarded the excitement as either in deficiency or excess. From this, it would appear that his theory was essentially the same as Brown's. When reduced to practice, like most others it failed in meeting his expectations.

Dr. Thomson differed widely from other theorists, in the manner of forming his theory. He first found out a speedy, safe and efficient mode of cure, and then formed his theory to suit his practice. When called upon to visit a patient grappling with death, he esteems it no time to theorise or try experiments;—he applies his tried, sure and speedy remedies, and it was not one in a hundred, cases that did not yield to the power of his remedies. Of what use, then we would ask, is the thousand frivolous articles of *Materia Medica*, and the interminable distinctions of *Nosology*? The experience and success of Dr. Thomson and hundreds of his followers clearly show they are useless, nay worse than useless to a practitioner, who must give immediate relief to his patient or let him sink into the grave. He finds no time now, when the tide of life is rapidly ebbing, to con over the endless names of nosology, or the long catalogue of disorders;—No he wants a remedy sure and speedy:—give him that, and the knowledge how to apply it, and he will save his patient, though utterly ignorant of all

The idle speculations that have crowded the pages of medical science since the days of Hippocrates to the present. Such a remedy Thomson discovered before he offered his system to the world; and indeed, it was in the fire of opposition that his remedies were severely tested. Such was the strength of prejudice that many chose death in the hands of the faculty, in preference to a speedy restoration to health in an unfashionable way from the hands of a man, who had taken a *diploma* from the *school of experience* instead of a *piece of parchment* from a medical college! He studied nature in nature's book, instead of learning speculative details in lecture room; and hence he learned nature as she was instead of learning what little theorists said she was. This accounts for his unparalleled success.

However erroneous speculatists may pronounce Dr. Thomson's theory, its errors if it have any, does not affect his practice; because his practice was first established, and therefore, not dependent upon his theory. No theorist was ever placed in a station so favorable, to arrive at truth in relation to the practice of the healing art, as Thomson was. He entered the school of experience without having his mind trammelled by the rules of any previous favorite theory. The energies of a strong, penetrating mind were applied to the investigation of the cause and nature of disease, and the effects of remedies without any antecedent bias hung upon the mind to blunt its energies or swerve its investigations.

Had any member of the *Faculty* discovered a mode of cure so safe, speedy and efficient, the whole host of *Esculapian* disciples, would have forthwith adopted it; but because medical science had not encircled Thomson's brow with her laurels, and crammed his head with her technical lore, and honored his pocket with a dressed sheep-skin, (that has conferred the title of M. D. on many a quack,) why truly his improvements must not be received!--the pride of medical science, can never brook the humiliating stoop, to receive improvements from the discoveries of an unlettered mind!

THOMSON'S theory supposes all disease produced by obstruction; and his mode of cure is, remove the obstruction. He regards all disease as the effect of one general cause, and therefore requires a general remedy. Through the long experience of thirty years, he has discovered those remedies, and adopted that mode of practice, which he thinks best calculated to accomplish this object. The virtue of his medicines were tried in the most stubborn and hopeless cases, and still proved effectual. His astonishing success at the out-set, roused the jealousy, and kindled the envy of the faculty; and such were the difficulties thrown in his way, that he had but few cases to attend, but such as were given over as incurable by the faculty. The progress of his skill was therefore, thoroughly tested at each step, by a succession of the most desperate maladies. Pressed as it were by necessity into the career of medicine, he pressed forward until triumph crowned his efforts, and success has raised him to take his rank among the benefactors of the world.

We do not perfectly agree with Dr. Thomson in all things; yet we do believe that he has done more towards establishing a simple, safe and efficient mode of removing the maladies, that afflict the body, and destroy life than any other one man. He has, notwithstanding many imperfections, inseparable from human systems, opened the fountain of true medical science, from which issues a clear stream, bearing on its bosom a potent balm for the healing of most of the maladies of man; viz: that no medicine should be used but such as acts in harmony with the laws of life. This appears to be a principle in the healing art, that no theorist before him thought of, at least no one introduced it as an essential principle in his practice. To his use of such medicines no doubt, much of his success was owing; for surely that practitioner who uses poisonous medicines, that war against the laws of healthy action in the system, can promise himself quite precarious success; and such is the daily practice of the faculty. The use of the heroic medicines is not

designed to produce at once a healthy action; but to produce another unhealthy action; and then nature's exhausted power must battle it out with the last—if it conquer the patient recovers, if not he dies; and the man is a good doctor because he goes according to his book! When will the world be rid of such learned quackery! Must a man lie, two, three, five and even ten weeks to let a fever have its course, by using the fashionable medicines, when he could have been cured in twelve hours! Surely even folly itself can not always be so duped!

The continued changes that the theories of medicine have undergone, from the days of Hippocrates to the present, is a convincing proof of the uncertainty and inefficiency of each system. The faculty were "ever learning, yet never able to arrive at the knowledge of the truth;" because they learned too much in the halls of speculation, and too little in the school of experience;—running to and fro in search of the grand catholicon, the elixir of life, but found it not. Like a bewildered huntsman in search of home, he pursues one direction awhile and finds his course is wrong, he turns another direction pursuing it eagerly for a piece, he finds he is again wrong, and thus he continues trying first one way and then another, in search of the right way, or until some one puts him in it. But the use of the Thomsonian remedies, for near forty year's experience has suggested some improvements in his system, but no alteration of its fundamental principles:—like the traveller, in a strange country, receiving the same intelligence from every one he meets, each succeeding inquiry confirms his previous information, and needs not change his course because he is already in the direct way to the desired place. The accumulation of facts coming under the eye of observation tends daily to confirm a correct theory, and sound practice, instead of leading to an incessant change, as false theories do.

Dr. Thomson is the first pathologist that referred all disease to one general cause. Rush considered disease

as an *unit*, namely, a morbid excitement; but this excitement be referred to two causes, deficiency or excess of vigor. Here we think the Dr. mistaken;—we have before shown that the power of life cannot be in excess, and consequently we are unable to conceive how the origin of disease, may be traced to a cause that cannot, in the nature of things, have existence.

Disease must either be produced by one general proximate cause, or by more than one. Our own view of the subject is, that disease is produced by one general proximate cause; and that cause is obstructed or *deranged* action. We have before shown that health consists in the regular operation of all the organs of the body;—while they perform their proper functions with harmony, there is freedom from pain—there is perfect health; but if any of them become injured or obstructed, so that their operations are stopped or deranged, disease unavoidably ensues. From this, it would appear, that while the organic machine moves regularly and harmoniously, a diseased action can not exist in the body at the same time; and it is impossible to enjoy good health, when any obstruction or derangement takes place in the organic action;—it is equally impossible to be afflicted with disease, when no obstruction or derangement does exist in the organic machine; hence we are forced to believe, that *obstructed* or *deranged* organic action is the proximate cause of disease. The severity of the disease is proportioned to the extent of the obstruction. There are many *remote* or *predisposing* causes of disease, or they may be called the exciting causes, as they produce the *proximate* cause. Amongst these may be enumerated, violent muscular exertion, excessive fatigue, reduction of animal heat, or as it is commonly phrased, the “catching of cold,” want of rest, intemperance in eating or drinking, unwholesome diet, impure air, inordinate indulgence of the passions, taking poisons, external injury, &c. &c.

In the treatment of disease, a knowledge of the exciting or predisposing cause, affords no aid in pointing

out the mode of cure; for, if your patient has the fever for instance, you derive no aid in effecting a cure, to know whether the remote or exciting cause was exposure to cold, contagion, or breathing miasma from a marsh, &c. as you would not accomodate your practice to either of these; but you would adopt that course of treatment which would remove the *proximate* cause.

Disease may therefore be considered, as the *effect* of one general cause, under all its different types or modifications. These different modified forms are the symptoms of disease: they are not properly, different diseases, but the different types or forms assumed by disease. Symptoms are the effects of disease:—the evidences of its existence in the system. The different names given to disease by physicians, originate from some one or more of the prominent symptoms. Disease would naturally exhibit different symptoms, or put on different forms, as different organs or parts of the system become obstructed or deranged in their operations, or as the morbid action becomes more general, or more violent. The peculiar state of the organs, or the idiosyncrasy of the individual, will also give a different character to the symptoms. It is a well known fact, that the same cause will produce the same general effects in similar organs in every individual; yet the effects, generally vary in their details.

Disease is termed *general* when it pervades all the organs of the system; and it is termed *local* or partial, when it affects only a part of them. It is called *primary* or *idiopathic*, when it originates independently of any previous affection in the system; and when it originates in consequence of another complaint, it is termed *sympathetic*. And when it is peculiar to a certain class of persons it is termed *endemic*; but if the same disease attacks a great number of individuals at the same time, or during the same season, in the same country it is termed an *epidemic*.

Whatever else, may be deemed necessary on this subject, the reader will find in its appropriate place, in our

treatment of disease, under its various modifications, types and stages.

Having finished our remarks on the subject of disease, we shall with the present subject, close the first part of our book. The second part of this work will present the reader, with a description of all the plants, used in the botanic practice, for medical purposes; it will also describe their medical properties, so far as we understand them, both in a simple and compound state, together with the method of preparing the simples, and forming the compounds for use.

PART III.

BOTANICAL MATERIA MEDICA.

MATERIA MEDICA, is that branch of medical science, which treats of the nature and properties of those substances, whether simple or compound, which are employed for arresting or removing disease, and for restoring health.

The articles, composing Botanical Materia Medica, are not so numerous, as those of the Mineral Materia Medica; yet the skillful botanic practitioner, finds their active remedial powers, amply sufficient, to arrest disease of the most stubborn character, under the most formidable symptoms. Among the thousand articles of the mineral Materia Medica, "but few," says Dr. Rush, "are used or relied on to effect a cure;" and even their operation is uncertain and precarious. This long catalogue of medicines, is more showy than useful; for the gentlemen of the *faculty*, have long since learned, by the bitter lessons of disappointment, that disease was not to be frightened away from its victims, by the array of a host of inefficient remedies, though well armed with technical lore. This fact, some candid men, among the wisest and most experienced practitioners of the old school, have frankly acknowledged, and sincerely lamented the uncertainty, and often, the fatal effects of even those remedies, upon which their greatest reliance for cure, was placed. The great number of changes, their Materia Medica, has undergone in different ages, from Hippocrates to Rush, is at once, a sufficient proof of their want of confidence in the articles it comprehended. It is, however, but little better for the mending; for whilst the

M. Ds. have expunged from their list of remedial articles, some that were inefficient, they have introduced others more dangerous. Their present list embraces between sixty and eighty, that are accounted *poisonous*, and some of them very virulent.

Many writers on this subject, have bestowed much pains, and employed time, reflection, and critical discrimination, to contrive the most suitable arrangement of the articles composing *materia medica*. Some have arranged them in classes according to their natural resemblance; others according to their active constituent principles; others according to their real or supposed virtues; and some have arranged them in alphabetical order. Of all these modes of classification, it may be said, each has its advantages and its defects. Botanical *materia medica*, is yet in its infancy; and, but little has been done towards classing the articles composing this branch of medical science. We shall attempt to arrange them according to their most obvious effects upon the system.

The indications to be answered in the treatment of disease, are few, and easily comprehended; and if all the articles, which answer each of these indications, were arranged under their appropriate heads, they would be much more readily understood and applied, by that part of the community, whose business engagements, will not allow them sufficient leisure, to make themselves thoroughly acquainted with this subject. We deem the arrangement, here proposed, best calculated to simplify the healing art; and thus render it more readily comprehended by the community at large; and consequently it must be the most useful.

It will be found that the articles described under one class, in many instances, possess also the specific properties of some other classes, though in a less distinguishable degree:—take for example the *Indian sage* or *sweating plant*, whose most obvious and active effects upon the system, entitle it to a classification among the bitter *tonics*; yet it also acts as a diuretic, sudorific,

stimulant, antiseptic, cathartic and emetic, though in a less active manner, than the articles do, which are arranged under these classes. In such cases, we will place the article under the head, where we think its most obvious and active properties entitle it to be placed; but, at the same place, we shall describe all its remedial virtues, so far as we have learned them. And here we take the opportunity of acknowledging frankly, that we have availed ourselves of the usual privilege of authors; viz: that of deriving aid either from contemporaries or predecessors. This work, therefore, presents the reader with the result of experiment compared with experiment; enlarged by accumulated observation, and contains the collective knowledge of the past, and present age on this subject;—the shortest man can see farther than the tallest, if he but take the pains to climb up and stand upon the tall man's shoulder.

We shall give the botanic, technical name, as well as the common names of the different plants, so far as we know them. Some plants have several names; and sometimes two or more plants have the same name; hence, the only way to avoid confusion, will be to pay particular attention to the botanic or technical names of such plants, and their distinctive properties.

Some Indian remedies, or plants whose medical virtues, have long been known and appreciated, among that people, are introduced in this work:—of course the Indians have given them no technical name; and we shall call them by their most familiar names..

CLASS, NO. I.

ANTISPASMODICS.

ANTISPASMODICS, are remedies designed to prevent, or remove, spasms or cramps of every kind. Under this head, will also be described the NERVINEs, as they act on the same principle, though not so powerfully as the antispasmodics.

ANTHEMIS NOBILIS.

CHAMOMILE.

THIS valuable plant, too well known to need description, grows spontaneously in the southern parts of England; but in this country, it is cultivated in gardens for the purpose of a family medicine. Its flowers have a strong, aromatic, though not unpleasant smell; but a very bitter, nauseous taste.

A strong decoction or tea made of them, is found valuable in spasmotic complaints, hysterics, colics, vomiting, gripings in bowel complaints, and the like.

The relaxing power of this herb, renders it valuable as an external application; and, when combined with bitter sweet, or staff vine and wormwood, forms Dr. Thomson's nerve or relaxing ointment:—an excellent remedy for hard swellings, corns, callouses, shrunk sinews, &c. Bruised and moistened with vinegar, it is a useful application for strains and bruises.

CAULOPHYLLUM THALICTROIDES.

BLUE COHOSH OR COHUSH, BLUEBERRY,
PAPPOOSE ROOT, SQUAW ROOT.

THE root of this plant is yellow inside, brown outside, hard, irregular, knobby, having many small fibers. Its stem is upright, straight, smooth, and divided at the top into two or three branches. Each branch bears three leaves, in the center of which, grow out its flowers, which are small, of a yellowish green color; and are succeeded by dark blue berries enclosing a hard drupe or stone.

This root is highly prized, and much used among the Indians; and by many distinguished botanists among the whites. Dr. Smith considers it the most powerful antispasmodic in the compass of medicine; and at the same time it is perfectly safe.

This valuable plant may be successfully used, either in decoction, tincture, syrup or cordial; and it is useful for hickups, colic, hysterics, epilepsy, cholera morbus, ague, and in short for almost every species of fits. It has been successfully employed in curing inflammation of the womb.

This herb obtained the name of Squaw Root, from the free use the Squaws made of it, to facilitate child-birth. They use it in a tea, two or three weeks before the expected time. White women have found especial benefit from the use of it, in a decoction moderately strong, for the same length of time.

FERULA ASAFOETIDA.

ASAFOETIDA PLANT.

This plant grows spontaneously in the mountains of Persia. The article commonly known by the name of

asafœtida in this country, is the resinous gum obtained from the roots of the plant. It is procured by cutting off the roots, after the plant is, at least four years old, and permitting the resinous juice to exude, which is then dried in the sun until it becomes hard.

It has, as its name imports, a strong, unpleasant smell, and a bitter, acrid, biting taste. Both its strength, and odor are, in some degree, lost by age, unless carefully preserved; a circumstance that must be attended to in its administration. When of a clear, or pale reddish color, and beautifully variegated with a number of white pustules, like tears, it is reckoned the best.

Its action on the system is both quick and penetrating, and generally affords a speedy relief in spasmodic complaints, hysterics, flatulence, and hypochondriacal complaints, particularly when produced by a torpid or obstructed state, of the bowels. It likewise possesses the properties of a stimulant, expectorant, emmenagogue, and anthelmintic or vermisuge. This has been found a valuable remedy for feeble or aged persons, when spasms, constipations or age, have so reduced the power of life, that its functions are performed in a feeble or languid manner; as it promotes the digestive process, enlivens the spirits, and increases the peristaltic motion.

It may be administered in tincture, in pills, or dissolved in water. The tincture is made by dissolving eight ounces of asafœtida in one pint of good proof spirits;—digest eight or ten days and then filter for use. Of this tincture a half tea-spoonful may be taken at a time and repeated as often as circumstances may require. Pills of a convenient size for swallowing, may be taken, one at a time, and repeated as often as necessary. Present relief, in asthma, and hoopingcough, has been obtained by the use of this article; but it rarely effects a cure of these complaints. For some children, it has proved a good article to expel worms.

ICTODES FŒTIDA.

SKUNK CABBAGE, SKUNK WEED.

THIS valuable plant, may be known by its smell, which resembles the peculiar odor of the Skunk, from which circumstance it takes its name. It is found growing in low, wetish lands, having a great number of fibrous roots, that run deep into the ground; and send up very large leaves, of a bright green, without any stem or stalk.

The roots and seeds are the parts used as medicine; they are antispasmodic and expectorant. The pulverized root may be administered in half or whole tea-spoonful doses, and repeated as often as circumstances require;—an over dose should be avoided, as it will produce vomiting, and it certainly can not be recommended as a pleasant or a valuable article for that purpose, being entirely too violent, and not unfrequently attended with head-ache, or swelling in the head similar to drunkenness.

As an antispasmodic, it is by some practitioners regarded as being scarcely inferior to any article of that class, particularly for convulsions of lying-in women, and those attending hooping cough, hysterics, and the like.

As an expectorant, it is valuable in asthma, coughs, complaints of the lungs and all affections of this kind. It forms, in connection with other expectorants, a valuable medicine in most affections of the lungs. It has also, says Dr. Cotler, performed important cures in acute, and chronic rheumatism.

SCUTELLARIA LATERAFLORA.

SCULLCAP, MAD-WEED, HOOD-WORT.

THIS plant is found in great abundance on the banks of rivers, and the borders of ponds, flowering in July and August. Root is yellow and fibrous. Stem erect,

square, and grows from one to three feet high, much branched;—its branches also square, smooth, and growing opposite. Leaves opposite, narrow, toothed, pointed, very sparse, on long foot-stalks;—blossoms small, of a violet color intermixed with small leaves.

As an antispasmodic it is recommended in convulsions, lockjaw, and all cases of nervous irritations, taken either in tea, or infusion. Dr. Beach says he has found this article remarkably efficacious in curing the complaint called *chorea* or *St. Vitus' Dance*. Dr. Thatcher reputed it an efficacious remedy for the hydrophobia or canine madness, taken in a strong infusion—every morning on the empty stomach for several weeks. For cattle, bitten by a mad dog, let it be mixed with their food or drink.

The medical virtues of the Mad-weed are not very extensively known; but so far as it has been tried, it has evinced the most active powers.

MONOTROPA UNIFLORA.

FIT ROOT, ICE PLANT.

This singular plant grows in the woods of the Western country; generally to the height of six inches;—several stalks spring up from the same root, and turn white in September; the stalk is like frozen jelly, and when held in the hand, dissolves like ice;—hence its name Ice plant.

The pulverised root has proved useful in curing fits in children; hence by some it is called Fit root. The juice mingled with water is good for sore eyes. It is possessed of the properties of an astringent. Either by itself, or combined with Lady's Slipper, it is regarded as a good *nervine*, useful in epilepsy and convulsions.

CYPRIPEDIUM LUTEUM.

YELLOW LADY'S SLIPPER, UMBIL, VA-
LERIAN, MOCCASIN FLOWER.

THIS essential article in the botanic practice, is found in every state in the Union, growing in all kinds of soil, but most common in bottom lands. Several varieties of the Lady's Slipper are found, some smooth, and some rough or hairy, exhibiting likewise a diversity in the blossom. A striking resemblance, however, obtains in the shape of the flower, in all varieties, which by the Indians was thought to resemble a moccasin; and hence they gave it the name of *Moccasin Flower*.

The root of the Lady's Slipper is of a pale dark yellow color, having a large cluster of long, round, crooked fibers, growing in a mat. The root sends up from one to five stems, which grow from one to three feet high, bearing each, from three to seven leaves, which grow out alternate, sheathing the stem or stalk. The leaves have many parallel nerves or fibers running through them, giving them a rough, uneven appearance.

The Lady's Slipper is esteemed one of the best *nervines* in the compass of medicine. It is a highly useful and efficient remedy in all cases of nervous irritation, hysterical affections, spasms, fits, &c. In easing pain, relieving spasms, and quieting the nerves, it possesses an energy superior to opium, without producing any of the fatal narcotic effects of that stupifying drug, which is the *sine qua non* with the faculty.

The roots are the only part of this plant, used in medicine. They must be gathered either in the fall, when the top begins to die, or in the spring before it grows much. When gathered, they must be separated, thoroughly washed and dried. After this, reduce them to powder, and preserve them from exposure to the air, or they will lose part of their virtue. One tea-spoonful in hot water is a dose;—it may be combined with ether

medicines, and is equally efficient in allaying or keeping down nervous irritation.

NEPETA CATARIA.

CATNIP, CATMINT.

THIS valuable and common herb, is too well known to require description. It has long been esteemed as a valuable external application in poultice to swellings; and taken internally in a tea or decoction, for hysterics, colic, spasms, worms, female obstructions, and the like. Administered by injection, it often relieves restlessness, colic and griping in children, giving the patient some of the tea to drink, at the same time. The bruised leaves steeped in vinegar, make a valuable poultice, applied to allay inflammation, and reduce swellings.

PANAX QUINQUEFOLIUM.

GINSENG, GINSANG.

GINSENG grows wild, in the hills and mountains of the United States; but most abundant in strong, shaded lands. Root a yellowish white, spindle-shaped, often forked. It sends up a smooth stalk, from eight to eighteen inches high; divided at top into three branches; each branch, as its technical name imports, bearing five leaves. Its leaves are oblong, jagged or indented on the edge, broadest towards the outer end;—its flowers are small and white, succeeded by a large red berry.

A few years since, the root of the Ginseng formed a valuable article of commerce. It was exported to China, where it readily brought its weight in silver, which is about sixteen dollars per pound. At one time, it is said that it was sold in that country for eight times that

amount, or one hundred and twenty-eight dollars per pound! This extravagant price shows the great demand there was for it, and the high estimate they placed upon it. Rafinesque says, that Ginseng, is the Chinese name for this plant, which in their language, signifies, "*man's health,*" indicating their high opinion of its medical virtue.

The Chinese physicians, says Rafinesque, give the following enumeration of the medical virtues of the Ginseng: "It warms the stomach and bowels; relieves the colic; removes the obstruction of the breast; sustains both body and mind, under excessive labor, by preventing weariness and dejection; quenches thirst, assuages hunger; prevents dropsy, sharpens the appetite; assists digestion; keeps away unpleasant dreams and fright; strengthens the judgment; cures nervous, asthmatical, and hysterical affections; all disorders arising from debility or weakness." This is the high character the Chinese faculty, give this plant, although they have used it for two thousand years;—it is certainly tinctured with the extravagance of superstition. Dr. Gunn thinks the American faculty, have tested its remedial virtues with more consummate skill, and has blotted it out of the list of remedies, he however allows it to be a "*pleasant bitter.*" He, with the faculty at his head, seems to undervalue its virtues, perhaps they wore the dim spectacles of *inattention*, when they *tested* its medical virtues.

Dr Thomson says, it may be successfully used as a nervine, in all cases of nervous affection, either alone, or in combination with other articles of this class. Dr. Greenway and Dr. Cutler, say that they have found it useful in convulsions, nervous affections, palsy, vertigo and dysentery.

The root should be dug in the fall, and when dry, reduced to a powder. Dose from a half to a whole tea-spoonful in hot water.

TELA ARANEI.

COBWEB, SPIDER'S-WEB.

WE introduce this article rather to gratify the reader's curiosity, than to recommend it as a remedy for any of his maladies; for we suppose that the reader can have no serious objection to be informed of the singular virtues that have been ascribed to the common cobweb, in different ages, by different physicians. We would just remark, that we do not use it, nor would we recommend its use;—it might happen however in some desperate cases, that some individual, may derive benefit from its use, when such remedies as we would recommend, could not be obtained.

An account of the medical properties of the cobweb, was published as early as the year 1644, in which some active remedial virtues were ascribed to it. For a long time it has been ranked amongst the quack remedies for the ague. Lately it has attracted the attention of some of the "faculty."

It is said to be almost a specific for the intermittent fever; and in one case of ~~intervallum~~ ~~intermissionis~~, it afforded extraordinary relief, by allaying the irritation, after the usual remedies had failed to produce that effect. One case of its remarkable efficacy in that distressing complaint, the asthma, is recorded. A patient who had been so badly afflicted with that most afflictive complaint, for six years, that he had not enjoyed one night's rest in that time, experienced so much relief on taking one dose, that he slept a good night's sleep. By some physicians it is recommended as being a valuable remedy in spasmoidic complaints, generally procuring tranquilizing sleep. In one instance when administered to an old, infirm asthmatic, it produced an effect resembling that of nitrous oxide gas; (commonly called exhilarating gas;) though its effects were of much longer duration, lasting nearly all night, increasing both the energy and the action of the muscular powers, and the

hilarity of his spirits. The patient sung, skipped, and danced about the room until nearly day-break, when he fell into a quiet sleep; and after waking up he found himself considerably relieved of his disorder, without experiencing any bad effect from his night's carousal.

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CLASS, NO. II.

ANTISEPTICS.

ANTISEPTICS are a class of medicines employed to prevent mortification from taking place, or to remove it after it has taken place. The vegetable kingdom furnishes many valuable articles of this class, far more active and efficient than any thing in the mineral kingdom; for this reason botanical practitioners, have often succeeded in curing mortifications that were pronounced incurable by gentlemen of the faculty. On account of the activity and efficiency of their *antiseptics*, botanical physicians have but little use for surgical operations in amputating a mortifying limb; for if the mortification is not too far spread through the system, so as to destroy the life of the patient, even should the mortifying limb be cut off, the botanical practitioner finds in his list of antiseptics, articles of sufficient remedial virtue, to save his patient without maiming him with the loss of a leg or an arm.

BAPTISIA TINCTORIA.

WILD INDIGO, HORSEFLY-WEED, INDIGO BROOM.

THIS plant grows mostly on poor soils and high hills. It has a large, irregular, woody root with many small fibers, blackish outside and yellowish within. It has a smooth round stem, growing from two to three feet high; much branched at top; both stem and branches while growing are of a yellowish green color with black spots. The leaves grow out alternate; they are small, somewhat

heart-shaped, broadest towards the outer end. The blossoms are of a yellow color, and are succeeded by an oblong pod, of a bluish or blackish hue, which color the whole plant assumes as it matures, and when dry, it is quite black. The taste of the root is unpleasant, acrid and nauseous.

Both the plant and root of the Wild Indigo, is used for medical purposes, applied externally or taken internally. It is regarded as a valuable antiseptic, in mortifications, and putrid complaints. Some practitioners regard it as the most powerful preventative of mortification known. Externally it may be applied either in poultice, fomentation, wash or ointment, to all ulcers tending to putrescence or mortification;—it is highly recommended for the putrid, ulcerous sore throat. In all cases where this article is used externally to prevent mortification, a weak decoction or tea of it, should be taken internally, as it will greatly aid in effecting a speedy and certain cure. If the tea is taken in too large quantities, it will prove both emetic and cathartic; and it can not be recommended for either of these purposes, as its operation is too severe. For internal use, an ounce of the green root may be steeped in a pint of water;—dose half a tea-spoonful once in five or six hours. If this should operate too actively on the bowels, add about half the quantity of dewberry or bayberry root, and that will regulate its operation.

RUMEX ACETOSÈLLA.

SHEEP SORREL, WOOD SORREL.

THE sorrel is a well known plant, growing in the woods, and shady places in every part of the country. Its leaves have a pleasant, though extremely acid taste.

The leaves of the sorrel, when bruised and applied to scrofulous ulcers, have effected some remarkable cures.

The sorrel plaster, has lately obtained great celebrity, as an efficient remedy for cancerous ulcers. So many remarkable cures of cancers, have been effected by this simple article, that this extremely painful and dangerous disease, is, in some degree, disarmed of its former terrors.

The following is the mode of preparing the Sorrel plaster:—Take any quantity of the Sorrel, bruise it well in a mortar, and then press out the juice on a pewter or glass plate; set it in the sun, till it becomes of a proper consistence to form a plaster; put it up in an earthen or glass vessel to preserve it for use.

The best method of applying this plaster, is to spread it thinly on a piece of bladder, leather or cloth of the proper size to cover the sore. These plasters, at proper intervals, must be removed, cleansing the cancer with soap suds at each removal.

Under the head, cancer, in the treatment of disease, the reader will find more said of the efficacy of this salve, accompanied with some examples of remarkable cures.

PHYTOLACCA DECANDRIA.

POKE, PIGEON-BERRY, GARGET ROOT.

The Poke is found in great abundance throughout the United States, mostly growing in rich lands. Its root is large, generally branching, covered with a very thin, brownish bark, and lasts more than one year. Several stems spring up from the same root, growing very large, at first green, afterwards turning purple.

A poultice made of the roasted root has often been advantageously applied to swellings, ulcers and rheumatic joints. A plaster prepared by drying the expressed juice of the berries in the sun, has been recommended by some, as a good remedy for cancers.

It is said, that a valuable cancer plaster, is prepared

from the juice of the berries. Gather the berries when ripe, express the juice, and then put it on plates in the sun until it becomes the proper consistence for a salve. This salve has acquired some reputation as a remedy for cancerous ulcers. The juice of the ripe berries, added to brandy enough to preserve it, taken in small doses three or four times a day, bathing the affected part with the same, has proved a successful treatment for some severe cases of rheumatism.

Take equal parts of the expressed juice of ripe poke berries, and of a strong decoction or tea of the rattle weed root, adding brandy enough to preserve it; and you will have a mixture that has cured some most inveterate cases of rheumatism, after all other remedies, usually employed, had failed. This last remedy rarely fails to effect a cure, when perserved in properly. The mode of using it is, take it in small doses, varying from a tea-spoonful according to the age or constitution of the patient, repeated three or four times a day; and bathing the affected part with the same.

Some practitioners recommend the ointment made of the roots, for sores, indolent ulcers, itch and the like. The ointment is made by taking a very strong decoction of the roots, strain it, and put lard into it: simmer it over a slow fire, until all the watery parts are evaporated.

PRINOS VERTICILLATUS.

WINTER BERRY, BLACK ALDER.

THIS shrub usually grows in swampy or wet lands, near ponds and streams. It commonly grows in clusters of from five to twenty in a bunch, from ten to twenty feet high. Its bark is of a dark ash color, spotted with white. Leaves alternate, sparse or scattered, edges indented with sharp teeth. Its flowers are small, white, succeeded by irregular bunches of berries, which

are of a beautiful red, when ripe, and remain suspended on the branches until winter, exhibiting a beautiful contrast with decaying nature.

A decoction of the bark is highly spoken of, as an antiseptic, tonic, and vermifuge. For eruptions of the skin, foul ulcers, and the like, a strong decoction of the bark is esteemed useful, applied externally as a wash, and taken internally as a drink. Dose, half a tea-cupful at a time, repeated as often as necessary. The decoction of the bark, is pronounced an excellent remedy for old chronic complaints of the bowels. The bark steeped in spirits, forms an excellent strengthening tonic, useful in most cases of debility.

PYROLA ROTUNDIFOLIA.

WILD LETTUCE.

THE Wild Lettuce, is an ever-green plant, growing on pine plains, and mountainous lands. Its leaves are small, round and smooth, resembling the round leaved garden lettuce. A strong decoction of this plant, taken internally, and used externally as a fomentation or wash, is good for diseases of the skin, and for ulcers.

PYROLA UMBELLATA.

RHEUMATIC-WEED, PIPSISEWA, PRINCE'S PINE, WINTER-GREEN.

THIS plant is found in all the States, but is most abundant in the Eastern and Middle States, growing in dry sandy plains, and mountainous lands. Its root is woody creeping, sending up stems at different distances. Its leaves grow in irregular whorls, of a dark green,

long, narrow, wedge-shaped, with a notched or indented edge, and a smooth, shining surface. Flowers from three to six in number, purple and white, growing on the top of the stem, succeeded by brown seeds resembling allspice.

A decoction made of the tops and roots of this plant, is esteemed as valuable for scrofula, cancerous ulcers, rheumatism &c.—used externally for bathing or washing the affected parts, and taken internally in doses of half a tea-cupful, repeated frequently through the day. It is also regarded as a good diuretic, relieving diseases of the urinary organs, dropsy &c. It is considered a strengthening medicine in fever and nervous debility.

PLANTAGO MAJOR.

PLANTAIN, GREAT PLANTAIN.

THIS common, well known plant, has long been esteemed as a popular remedy for poisonous bites and stings. Tradition furnishes us with an anecdote about a battle between a toad and spider, as being the lucky circumstance, that lead to the discovery of its remedial virtues in curing poisonous bites. The tea taken internally; and either the expressed juice, or the bruised leaves, applied externally is the mode of treating poisonous bites, or stings. The same treatment has often proved successful, for sores, tumors, wounds, bruises, and the like. The expressed juice is good for sore eyes; and the decoction is valuable for bowel complaints, and bloody urine.

RUMEX CRISPUS.

YELLOW DOCK, CURLED DOCK, NARROW DOCK.

THE root of this plant is perennial, fusiform or spindle-shaped, yellow, having few fibers. Its leaves are mostly radical, that is, grows from the root, long, narrow, waved, and curled on the edge.

The bruised roots made into a poultice, has been successfully employed for healing bad ulcers; reducing hard tumors; curing the itch, eruptions on the skin, and the like, using at the same time, a tea made of the bruised roots. Both the roots and seeds have been successfully employed in curing dysentery:—it is slightly purgative, and is an excellent alterant and corrector of the fluids.

MYRRHA.

MYRRH, GUM MYRRH.

THE article known in this country by this name, is the concrete juice of a shrub mostly found in East India. The best Myrrh is of a light brown color, partly transparent, of a bitter, slightly pungent taste, and a strong aromatic smell.

Myrrh forms a part of some of the most useful compounds used in the healing art. It is esteemed a most useful article in all malignant, putrid and pestilential disorders, applied both externally and internally. In short, it can not be used much amiss in any complaint. The method of preparing, using and compounding in various ways, will be shown among the compounds.

ULMUS ALBUS.

SLIPPERY ELM, WHITE ELM.

AMERICA produces no tree superior to the Slippery Elm, for medical purposes. For old sores, ulcers, burns, wounds, bruises, &c., few things are superior to a poultice made of the inner bark of a young Slippery Elm tree. Says an eminent physician, "Those surgeons in the army, during the late war, who dressed the wounds of the soldiers with the Slippery Elm poultice, seldom met with any mortifications among their patients." This poultice rarely fails to arrest mortification. A tea, or mucilaginous jelly, made by boiling the inner bark, well pounded, when drank freely, is a certain and valuable remedy in all bowel complaints. The celebrated Dr. Gant, private physician to president Jefferson, who was so universally celebrated for his unequalled success in curing the dysentery, acknowledged that a great part of his success in treating that painful disorder, was owing to his free use of the Elm tea or mucilage. The mucilage or tea of the Elm, as above described, is found to be an excellent article for consumptions and coughs.

LAURUS SASSAFRAS.

SASSAFRAS.

THE sassafras is well known, and grows in great abundance, in the Western country. The bark has a fragrant smell, and a spicy, agreeable flavor. The flavor and odor, reside in a volatile oil, which may be obtained by distillation, and is known by the name of the oil of sassafras. The root, bark and flowers, make a very pleasant, and wholesome tea; and is regarded as an excellent article to cleanse and purify the blood, or remove humors from the skin, especially when drank in mode-

ration; for if drank in to great quantities, it will induce debility, by thinning the blood to much.

The bark of the root, bruised and made into a poultice with corn meal or wheat bran, has been found an active remedy for mortifying sores, ulcers, and the like. The oil of sassafras has likewise been brought in notice as a good antiseptic;—it is applied to the surface of the inflamed or swelled part, by bathing or rubbing. It has also been successfully used as a remedy for rheumatic pains;—bathe the part affected with the oil;—then cover up in bed and promote perspiration by drinking freely of diaphoretic tea;—if the patient do not sweat freely, let some artificial means be resorted to, that will produce a copious perspiration.

The pith of sassafras, mashed and steeped in clean, cold water, forms an excellent remedy for inflamed sore eyes. The bark, leaves and pith, bruised and steeped in cold spring water, yield a mucilage that is reputed highly useful in dysentery, scurvy, scrofula or king's evil, &c. The oil of sassafras has lately acquired considerable reputation as a discutient;—it has frequently removed wens, simply, by being repeatedly rubbed on them.

SMILAX SARSAPARILLA.

SARSAPARILLA.

THIS vine is a native of Spanish West Indies, and was taken thence into Europe, above two hundred and sixty years ago. It was also imported into the United States, until found to be also a native of this country. It is a small running vine, of a dark brown color out side, and a pale white within;—it is very bitter to the taste. The imported root is not quite so large as that growing in America; and is of a darker color, and much wrinkled on the outside.

The estimate placed upon the remedial virtues of the sarsaparilla, by the faculty, has, by no means, been uniform. For some time after it was first introduced into the catalogue of remedies by the Spanish faculty, it was regarded as a specific for that most filthy, and disgraceful of all diseases, the venereal; but it afterwards sunk into disrepute, whether from the want of virtue in the plant, or from the want of attention in the practitioner, or from the want of knowledge how to treat the complaint, we shall not stop to determine.

Many eminent physicians of the present day, regard the root of the sarsaparilla as a valuable article in the treatment of the venereal. It is considered useful in curing all disease of the skin, and cleansing the blood. It is found to be a useful remedy in the treatment of scrofulous sores, gout, rheumatism, and diseases induced by the use of mercury. It is an excellent remedy for weakness of the stomach, as it gives tone and strength to the bowels, and the digestive organs. Where the system has been injured by the use of mercury, or where any infection lurks in it, connected with the venereal, it has been found an excellent remedy. The root is better than the vine: take one ounce of the root split up fine, to a quart of water; boil down to a pint. Of this, the patient ought to drink, from a pint to a quart, a day.

TRILLIUM LATIFOLIUM.

BETH-ROOT, INDIAN BALM.

THERE are different species of this valuable plant; but they bear a general resemblance, in appearance, and their medical qualities are so much alike, that they have been indiscriminately used for the same purposes.

The root of the Indian Balm, is perennial, short, thick, in some degree, resembling the Indian turnip; it

is wrinkled, of a brown color, giving out many small fibers. Its stem is erect, smooth, and grows from four to eight inches high; found mostly in meadows. Leaves are oval three in a whorl growing at the top of the stem; and one terminal flower, rising above the leaves; color varying according to the species, red, white, purple; bell-shaped, succeeded by a small berry that contains the seed.

A poultice made of this root, forms a valuable application to tumors, scrofulous and putrid ulcers, mortifications, and the like. A decoction of this root is regarded, as one of the best remedies for excessive female evacuations, or flooding. It is highly esteemed, and much used among the Indians for this purpose.

The Ceth-root is useful in all kinds of hemorrhage, asthma, coughs, diarrhea, dysentery, &c. The pulverized root may be given in tea-spoonful doses in hot water; or it may be combined with other medicines. This plant is a good astringent, as well as antiseptic.

BEAR'S FOOT.

This valuable plant, grows in the southern and southwestern parts of the United States.

Its roots are blackish outside, and whitish within, resembling in size and shape, a small sweet potatoe, growing several from one common head, from which head, spring up the stalks, generally several together rising five or six feet high. Leaves are about the size of a man's hand, but greatly resemble a bear's foot in shape, whence it has received its common name.

By those who have had opportunity of testing the medical virtues of this plant, it is highly prized as being a specific for the cure of the white swelling. The following is the usual mode of preparing and applying this valuable article: Take the desired quantity of the root, beat it up fine, boil it in any kind of oil or soft grease,

bear's oil, or sweet oil is the best, strain out the oil when sufficiently boiled to extract all the virtue of the root.

With this ointment, bathe the swelled part two or three times a day; & after each bathing, cover the swelling with flannel, running a warm smoothing-iron lightly over the place for a few minutes. This process not only increases the effect of the ointment, by facilitating its absorption; but it also relaxes the parts, and stimulates the languid vessels to a more vigorous action, which greatly assists in throwing off disease.

This method of treating white swellings, has been employed several years with uniform success; and has effected cures, in some remarkably bad cases, after all the usual remedies had failed. For many years, the individual who discovered this mode of curing the white swelling, profited by concealing the remedy, and monopolising the practice.

This ointment affords, generally, a speedy relief to the ear-ach, and deafness.

This ointment will be found a valuable remedy for the rheumatism, by applying it to the affected part as above described, and at the same time, drinking the saturated tincture of the roots.

VERBASCUM.

MULLEN.

THE mullen is too well known to need description.—The leaves boiled in sweet milk, is said to be a valuable remedy for the bowel complaint.

It has been often employed with great success, either in the form of fomentation, or in poultice, to relieve the piles, and other painful swellings. Dry and pulverize the leaves apply this powder to proud or fungous flesh, and it will destroy it.

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ERYTHRONIUM FLAVUM.

**ADDERTONGUE, RATTLESNAKE VIOLET,
SNAKELEAF, DOGTOOTH VIOLET,
YELLOW SNOWDROP.**

THE root of this plant does not die in winter, grows deep in the ground, is bulbous or onion-shaped, brown outside and white inside, with many fibers issuing from the base of the bulb like the onion has. Leaves grow out on the stem near the ground, giving them the appearance of being radical; but one the first year, two afterwards, smooth, shining, long, narrow and pointed, spotted, green and purple, giving them a singular, though beautiful appearance. Its flower is yellow, nodding, supported on a smooth, shining stem, at some distance above the leaves.

This plant is regarded as being antiseptic and emetic. It is not often used as an emetic. It is valued most for its active and efficient powers to cure the scrofula. Many very bad cases of this disease, have been successfully treated in the following manner: Take the fresh roots and leaves, stew them in milk, and apply them as a poultice to the sores, drinking an infusion at the same time. Such treatment, says a physician, who has often tried it, rarely fails to effect an immediate cure.

NYMPIA ODORATA.**WHITE POND LILY, TOAD LILY.**

THIS valuable plant is always found growing in the water, generally in the edges of ponds; hence it has its common name POND LILY. Its root is perennial, very long, blackish, hairy, full of knots, running horizontal, and is nearly as thick as a man's wrist. Its leaves are very large, round, cleft from the edge to the stem; each

lobe of the leaf terminates in a short, acute point; their upper surface is smooth, glossy, without veins, and the lower surface is reddish, with radiating nerves. Flowers large, white giving out a sweet, pleasant odor; opening to the sun in the morning and closing at night.

The root of this plant is regarded as a very valuable article of medicine, whether administered internally, or applied externally. A poultice made by boiling the root in sweet milk is good to reduce tumors, allay inflammations, and heal ulcers, &c. An application of the bruised leaves are found to be useful for the same purpose.

The decoction, and tincture, made of the root, or either of them, is a valuable astringent tonic, used with advantage in diarrhea, dysentery, and all cases of debility. The fresh juice of the roots combined with lemon juice, is said to be an excellent discutient to remove freckles, pimples, or blotches from the skin.

PINUS BALSAMEA.

CANADA BALSAM, BALSAM OF FIR, HEMLOCK FIR.

THE Fir tree is very common in the nothern climates. It is also found as far south as the mountains, that divide Tennessee from North Carolina, growing only on the highest mountains.

The article known by the name of Canada Balsam or Balsam of Fir, is the liquid resin that exudes from this tree, which is collected for medical use. It is of a light color, transparent, inflammable, and very viscid or tenacious.

Taken in doses of half a spoonful at a time, it is very successfully employed in many complaints of the breast and lungs, particularly when accompanied with pain, soreness or cough; it relaxes the system, loos-

eas the bowels, cleanses and heals internal ulcers, and removes disorders of the urinary passage; and not unfrequently has been found valuable in curing the gleet, as well as the preceding stages of the venereal complaint. In the treatment of the complaint, known amongst women as the flour albus or whites, it will be found a useful article.

As an external application it will be found usefnl for ulcers, sores, wounds, and the like; and it forms an excellent ingredient in all healing salves. We know of nothing that will heal up a fresh wound quicker than an application of this balsam to it when tied up: of this we speak with all that confidence, that experience can give, in repeated successful trials of its virtue.

PINUS CANADENSIS.

HEMLOCK TREE.

Do not be scared reader, this is not the cicuta of the faculty, nor the hellibore of the ancients. It is a very innocent, and at the same time, a very usefnl article; and is perhaps, much better known by most of you by the familiar name of Spruce Pine.

A fomentation of the Hemlock will be found a very successful application to swelled testicles, caused by the mumps; and is equally good applied to the swelled breasts of females produced by the same cause. The leaves and boughs, have acquired great celebrity for prodncing perspiration, by drinking the tea and sitting over the steam of it. The inner bark is the part used for tea generally; and it will be found a good astringent. The oil and essence, are good, as a stimulant tonic, useful in colds, &c. The oil forms a valuable ingre-dient in bathing drops.

CARBO LIGNI.

CHARCOAL OF WOOD.

CHARCOAL is not only an essential article in the arts, but is also a valuable article in medicine. It is not only incapable of putrefying or rotting like wood; but it possesses, in a high degree, the peculiar property of preventing putrefaction.

A poultice made of prepared charcoal and yeast, is one of the most powerful anti-septics known in the compass of medicine. It would be found equally good to arrest internal mortification, were it not extremely difficult to get it pulverized fine enough not to irritate the tender surface of the bowels.

Common charcoal can be prepared for medical use, in the following, or some similar manner: Take pulverized charcoal, inclose it in a close iron vessel heat it to redness, and keep up the heat until it ceases to blaze, or emit any smoke: then let it cool, preserving it from the air, bottle it up in close bottles for use. If it be exposed to the air it will absorb fixed air, which will render it unfit for use; or at least impair its efficacy.

Tainted meat may be restored to its natural state by charcoal, either by rolling it repeatedly in fresh portions of pulverized charcoal, or by boiling the meat a short time in renewed portions of it. For this purpose common charcoal will answer, though not so well as that prepared, as above described.

ACIDUM ACETOSUM.

ACETOUS ACID, VINEGAR.

VINEGAR was the first artificial acid that man learned to produce. It was known to the ancients, and much used by them, many years before they knew any other, except those which exist ready formed in different vegetables.

The process by which this common, and useful acid is formed, is termed the acetous fermentation; i. e. it is the product of the saccharine matter, or sweet vegetable juices fermented, such as cider, wine, &c.

All vinegar contains mucilaginous impurities, which, on exposure to the air, are apt to become turbid, and ropy, and will finally spoil it. This inconvenience may be remedied by boiling the vinegar in open bottles, for one hour, placed in a kettle or pot of boiling water; after which, it may be kept corked for use.

Vinegar is possessed of very strong antiseptic powers; and for this reason it is successfully employed to correct the putrid tendency of the fluids of the body in putrid and pestilential fevers. It is frequently employed with success to settle the stomach in cases of nausea or vomiting. The deleterious effects of narcotic poisons, have some times been obviated by this article.

Vinegar saturated with common table salt, and mixed with equal portions of warm water, has been recommended by some successful practitioners, as a valuable remedy for dysentery.—Dose two table-spoonsful, repeated frequently, until relief be obtained. The same mixture is a valuable application, by way of fomentation, to sprains, bruises, inflammations, swellings, and the like.

Inhaling the vapor of vinegar into the lungs, in all diseases of those organs will be found useful; relief from the sore throat may be obtained in the same way. Few things are better to diffuse through rooms of the sick, in putrid and pestilential disorders, to correct the putridity of the air, and render it more wholesome both to the patients and attendants, than the vapor of vinegar.

CEREVISIÆ FERMENTUM.

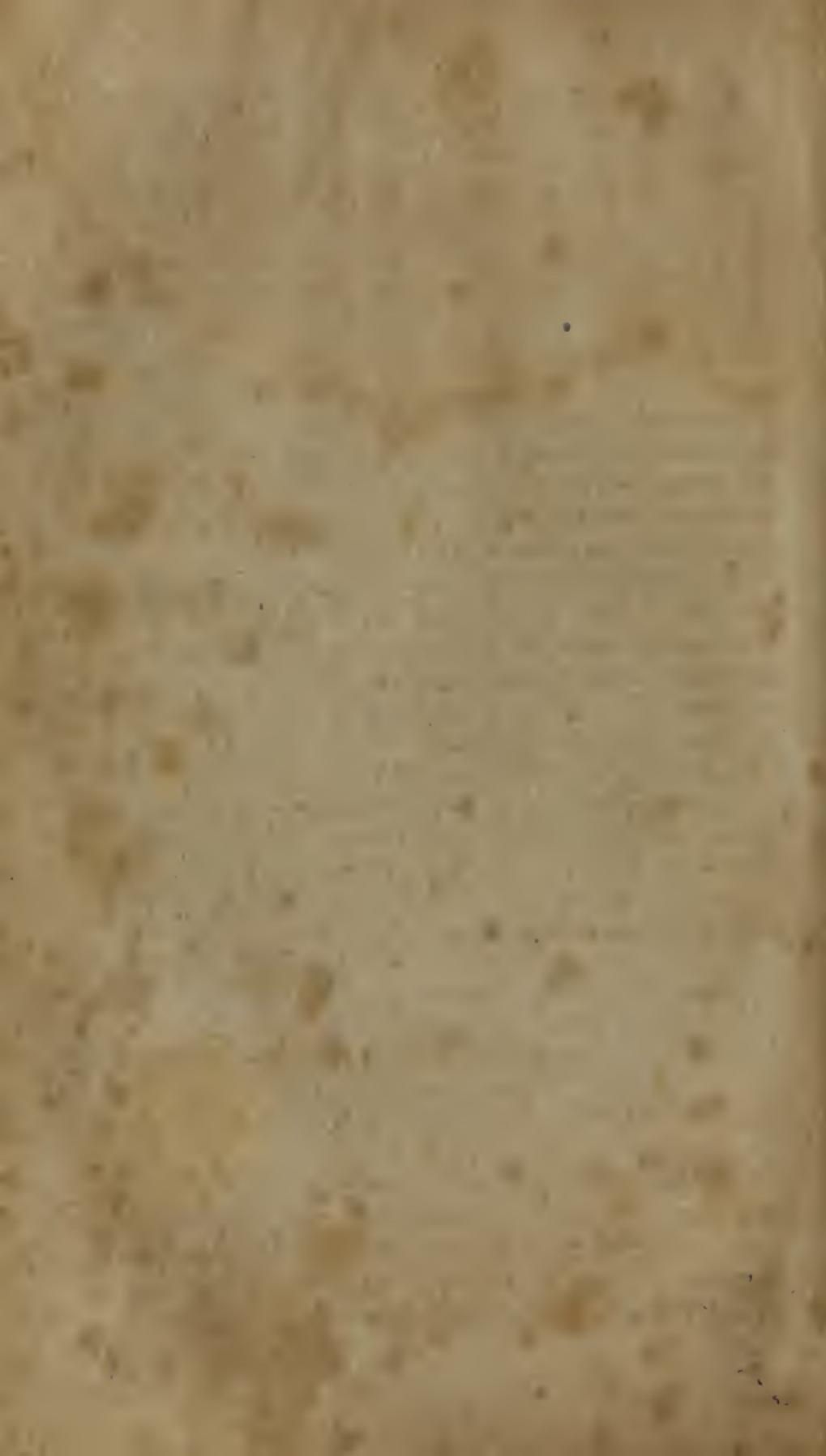
YEAST, BARM, BREWER'S FOAM.

THIS article has deservedly acquired considerable celebrity, in the hands of some distinguished practitioners, for its efficacy in curing the putrid fever, and the malignant, ulcerous sore throat.

Recipe for making: Thicken two quarts of water with four spoonsful of rye or wheat flour; boil for half an hour, and sweeten with half a pound brown sugar; put it into a jug and shake it well together, and then let it stand one day near the fire to ferment, leaving the jug unstopped: then pour off the thin liquor, that has collected on the top, and cork up the remainder for use. There are different methods of preparing yeast; but we think the above as good as any, and easy done. Dose two tablespoonfuls every three hours.

Dr. Cartwright, states that he had tried this treatment, on above fifty patients in the putrid fever, without ever loosing one. All of them experiencing immediate relief, recovered quickly.

Yeast combined with charcoal, forms a valuable poultice for dangerous ulcers, and parts threatened with mortification. See charcoal.



CLASS, NO. III.

ASTRINGENTS.

ASTRINGENTS are a class of medicines, that are employed to correct looseness and debility. This is a class of medicines that are very abundant and very useful: few medicines requiring to be more generally used. So great indeed, is their influence on the system, that they alone have checked, and removed fevers, and even many other complaints in their incipient or forming stages. This fact evinces the correctness of employing them as an ingredient in all diaphoretic compounds. Their free use during recovery from disease, has a tendency to prevent relapses. Astringent tonics, are the proper remedies for floodings, and hemorrhages of every description; for all relaxed states of the system, and profuse evacuations of almost every kind.

Astringents must be used sparingly, or omitted altogether in some cases; as, in obstinate costiveness, in burning fever attended with a great and constant dryness of the mouth, particularly if this dryness is increased by using astringent remedies.

AGRIMONIA EUPATORIA.

AGRIMONY, COCKLEBUR, STICKWORT.

AGRIMONY has a perennial root; a round hairy stem, growing from one to two feet high: its leaves are alternate, rough, ragged, hairy and unequal, lower ones the largest. Blossoms yellow, growing on a long terminal spike, which is merely a continuation of the main stem,

producing a small, green, bristly bur, which in the fall of the year, sticks to clothes that comes in contact with it.

A decoction of the root of Agrimony, is a mild astringent tonic, useful in bowel complaints, fevers, &c. The expressed juice of the bruised plant, or a strong infusion of the roots, sweetened with honey, is an excellent medicine for jaundice, scurvy, and habitual diarrhoea or looseness. Dose of the infusion, a half pint; of the juice, two table-spoonsful, three times a day. The herb has sometimes been successfully applied to fresh wounds.

AMARANTHIUS SANGUINEOUS.

AMARANTH, PRINCE'S FEATHER.

IN some parts of the country, the Amaranth is much cultivated in gardens, for its beautiful red appearance; it rises to the height of from three to five feet. The whole plant, more or less exhibits a red appearance, but the blossoms are a bright red, the leaves dark.

The Amaranth ranks among our best astringents; but it is most esteemed as a remedy in profuse menstruation, and has often cured, when other remedies of the astringent kind have failed. Dose, one gill of the decoction of the leaves, repeated every hour until the desired effect is produced.

ALISMA PLANTAGO.

WATER PLANTAIN.

THE root of the Water Plantain, is perennial. Its leaves are of a light green color, and very much resemble the common plantain. It is found mostly in wetish soils, or in the margin of stagnant waters.

The root of the water plantain is considered an excellent astringent, useful in most cases where this class of medicines are needed; highly prized in the treatment of bowel complaints, after the bowels have been cleansed with a gentle purgative.

The Wyandot Indians esteem the plantain poultice very highly, as a useful external application for old sores, wounds, bruises, and the like, even when tending to mortification. Their method of preparing the poultice is as follows: Take the roots, wash them clean, and boil them till soft;—mash them, and apply to the affected part, having first washed it with the water in which the roots were boiled. When the case is bad, they renew the poultice two or three times a day. This treatment, is said to remove inflammation, reduce swellings, cleanse and heal, foul and inveterate ulcers.

COMPTONIA ASPLENIFOLIA.

SWEET-FERN, FERN-GALE, FERN-BUSH, SPLEEN-WORT.

This shrub is found throughout the United States, growing mostly on mountains and sandy plains. The whole plant possesses a strong, spicy scent, easily perceived by rubbing the leaves between the fingers. Roots are long, running horizontal;—the bush much branched, growing from one to four feet high, clothed with many leaves about half an inch broad, and from three to five inches long, jagged or indented on each edge. Flowers appear before the leaves, and are succeeded by a round, bur-like pod containing the seeds.

Sweet Fern is both astringent and tonic, and is advantageously used in diarrhea and dysentery, either in children or adults. It is an excellent article for looseness of the bowels among children, as it may be rendered so pleasant, by the addition of cream and sugar, that

they rarely refuse to take it. The decoction is sometimes used in inflammations, rheumatism and asthma, both as a drink, and fomentation.

DELPHINIUM CONSOLIDIUM.

LARK SPUR.

A plant cultivated in gardens, and so well known that we forbear describing it. Some good practitioners recommend the decoction of the flowers as a certain, and speedy cure for cholera morbus. Take enough of the flowers to make the decoction very strong; then sweeten and take a tea-cupful at a dose, until relief is obtained.

ERIGERON PHILADELPHICUM.

FROST-WEED, COCASH, SKEVISH.

THE Frost-weed is found in every state in the Union, growing in fields, which it sometimes entirely over-runs; seldom found in the woods or mountains. The root is yellowish, composed of many branching fibers. Sometimes two or more stems spring up from the same root, from one to three feet high, branching near the top. Flowers are numerous, of a yellowish white, sometimes purplish or blue, and of a downy appearance. Leaves oblong, very small at the top of the plant, and largest nearest the ground. This plant continues in bloom, until the autumnal frosts, which circumstance, has given rise to one of its names, Frost-weed.

This plant is astringent, diuretic, and sudorific in a high degree. There are two other species or kinds of this valuable plant, whose medical properties are the same, and they are indiscriminately used;—distinguish-

ed by their botanic or technical names, but not by their common; they are *Erigeron Canadense*, and *Erigeron Heterophyllum*.

The medical powers of these plants are very active, and require cautious use. May be employed, fresh or dry, in decoction, infusion, tincture, extract or oil. The oil is considered one of the most efficient styptics in medicine.

Rasinesque says the diseases relieved or cured by this article, are, dropsy, suppression of urine, inflammation of the kidneys, gravel, gout, suppressed menstruation, coughs, hemorrhages, dimness of sight, &c.

It is said that the oil applied to a cut or wound, and drinking a little of the decoction or infusion at the same time, will instantly stop the bleeding.

Perhaps no article can be used, with more success in all diseases of the bladder or kidneys, than some preparation of this plant.

GEUM VIRGINIANUM

EVAN ROOT, CURE-ALL, CHOCOLATE ROOT, THROAT ROOT.

Most of the Eastern, Western, and Middle States produce this plant; scarce in the Southern. Its root is small, brown, crooked, running horizontal in the ground, and sends up a round, hairy, erect stem, which grows from one to two feet high, bearing a few terminal, white flowers on the top.

The root of this plant is the part used for medical purposes; and may be employed either, in tincture, powders, decoction or infusion. It is both astringent and tonic; and is regarded as a valuable article for bleeding at the lungs, diarrhea, dysentery, colic, sore throat, dyspepsy consumption, &c. Dr. Jones recommends it as an excellent article to restore health and vigor to

the most enfeebled, and shattered constitutions. His mode of using it, was to boil the root in sweet milk or water, (milk is the best,) and sweeten it with honey, or sugar. Of this decoction, drink one pint a day.

There are several species of this plant, all of which may be regarded as valuable medicines, for the above mentioned purposes.

HAMAMELIUS VIRGINIANA.

WITCH-HAZEL, WINTER BLOOM, SPOTTED ALDER.

THIS shrub is found in most parts of the United States, growing on hills, mountains, and stoney banks, near streams. It grows from ten to twenty feet high; bark smooth, gray, variegated, with brown spots. Leaves large, smooth, oval or roundish and alternate.

The bark and leaves are slightly bitter, and a decoction of them is very astringent, and forms a good styptic. The leaves are the highest esteemed, as a medicine. A decoction of them may be usefully employed for any internal hemorrhages, and for bowel complaints. A snuff made of the leaves is good to stop bleeding at the nose; and may be advantageously applied to wounds to check the effusion of blood. A poultice made of the bark and leaves, is a good application for painful tumors, and inflammations. It is an efficacious article to remove inflammation from sore eyes. This is also, a good article for women at certain periods, which will be seen in its proper place.

OROBANCHE VIRGINIANA.

BEECH DROPS, CANCER-ROOT, BROOM RAPE.

THIS singular plant is found growing in every state from Maine to Georgia, generally under the shade of the beech, and frequently upon the roots of that tree; hence the name of beech drops. Its root is bulbous, yellowish and brown, covered with a ~~sort~~ of short, crooked fibers. Its stem rises from ten to fifteen inches, is much branched, covered with short, scattered scales, instead of leaves, of which this plant is destitute. Flowers grow out just above the scales, all along the branches.

Every part of this plant is highly astringent, and possesses a nauseous, bitterish taste. It has been celebrated as a remedy for sore mouth, dysentery, &c.; but its principal reputation, with some practitioners, is its value for cancerous affections. It is said this formed a part of the celebrated cancer powder of Dr. H. Martin, who acquired considerable reputation, for his successful treatment of this painful, loathsome, fatal scourge of the human race. The powder of this root applied to obstinate ulcers, has proved of great advantage, and produced some admirable cures, drinking, at the same time, a decoction of the root and plant. It has also been found a useful application to St. Anthony's Fire, viz: drinking the decoction and washing with it. This treatment gives immediate relief to gallings or excoriation of the skin.

SWEET GUM TREE.

THIS tree grows in great abundance in many places in the United States, generally, in low grounds, and rich bottom lands. The inner bark, and rosin or gum of this

tree, are the parts used for medical purposes. They are highly astringent. In diarrhea, dysentery, or flux, the following treatment has seldom failed of giving relief: Take the inner bark, boil it in new milk, and of this, decoction, give a tea-cupful every hour until relief is obtained, having first cleansed the stomach and bowels with a mild cathartic. The efficacy of this remedy was fully tested by many of the soldiers during the late war, under very unfavorable circumstances; yet it proved to be, the safest, and most efficient remedy they could find.

The rosin or gum mixed with a little lard, is said to be an excellent remedy for the itch.

NUTMEG TREE.

THE article known among us by the name of nutmeg is the fruit of a tree growing in the Molucca Islands. The hull or shell, and involucrum of the nutmeg is called mace, and possesses, though in an inferior degree, all the properties of the nutmeg.

This article is a good astringent and nervine; it is also a pleasant aromatic and stomachic. It is useful for infants afflicted with flatulence or colic. It is a good article applied to the navel cord, when first bound up, after it is cut off, promoting a rapid healing of the part.

MYRICA CERIFERA.

BAYBERRY, CANDLEBERRY, WAX MYRTLE.

BAYBERRY is a shrub, growing from two to twelve feet high; and is found in most parts of the Union; it however, grows larger in the South than in the North.

This shrub is covered with a grayish bark. Its top is much branched;—leaves are oblong, wedge-shaped, broadest at the outer end, sometimes toothed. This bush bears numerous green or grayish berries from which is collected a substance called bayberry tallow, of which candles are frequently made; hence its name, Candleberry.

The bark of the root forms a powerful astringent tonic; and one of the most useful articles in *materia medica*, of the astringent kind, being one of those articles that can hardly be used amiss, where articles of this class are indicated. Given in large doses when the stomach is foul it operates as an emetic. Used as a snuff, it frequently relieves the headache. The inner bark applied in the form of a poultice to scrofulous sores, the patient drinking a strong decoction of the bark of the root at the same time, is said by some to have wrought wonders in the way of cures. Dose of the powdered bark, from half to a whole tea-spoonful at a time.

POTENTILLA CANADENSIS, OR REPTANS.

CINQUEFOIL, FIVEFINGER.

A TRAILING vine, that grows on pasture grounds, and is something similar to the strawberry. Each stalk, as its name imports, bears but five leaves, which grow in a bunch together, of equal size, and bear a yellow flower.

The root is astringent;—boiled in new milk, a handful to a quart, is recommended as a good remedy for dysentery, and bowel complaints generally. It is a mild check to the immoderate flow of the menses.

Dr. Smith states that he has experienced its value in fevers, particularly, when there was great debility, lassitude, and night sweats; it seldom failed to give relief from all these bad symptoms.

PRUNUS CERASUS

WILD CHERRY, BLACK CHERRY.

THE bark of this common and well known tree is bitter, astringent and tonic; and sometimes expels worms. Useful in many cases where astringents and tonics, are needed. The bark of the root is the most powerful, and possesses some antiseptic powers. The decoction of the bark of the root may be advantageously applied as a wash to foul and mortifying ulcers; be cautious about taking too much internally.

RUBUS STRIGOSUS.

RED RASPBERRY.

OUR country produces several species of the raspberry, all good for medical purposes, but none so much esteemed as the red raspberry. The stem grows from three to six feet high, unbranched, and thick set with stiff hairs. The leaves are pale green on the upper, and almost white on the under side; their shape is somewhat similar to the common black raspberry.

The leaves of the red raspberry, are highly esteemed as an astringent. A decoction of them is useful in bowel complaints, for children, and is good to wash sore nipples, to moisten poultices, for scalds and burns. A strong tea of these leaves, is esteemed a valuable article to regulate the pains of women at, and near the period of travail.

RUBUS PROCUMBENS.

DEWBERRY

THE root of this briar, forms a good astringent, and is not very unpleasantly tasted. Take a handful of the roots, wash and boil them in a quart of new milk or water; of this decoction, you may give a half tea-cupful at a dose, for adults. It will be found a potent remedy in chronic or old bowel complaints, particularly, where the patient has a debilitated or injured constitution, either from age or other causes; because it operates also as a tonic. When the stomach and bowels become relaxed through age or debility, a tincture of the dewberry root, will be found an excellent restorative. A little honey added to the decoction of the dewberry makes a healing wash for sore mouth and throat; and this last mentioned preparation, has often cured the disease among children, called thrash.

The common black berry possesses the same medical properties that the dewberry does, though in a less active degree.

HEUCHERA AMERICANA

ALUM ROOT

THE root is a very intense astringent. The powdered root forms the basis of powder which has lately acquired some celebrity for the cure of cancerous ulcers. Dr. Barton avers that no real cancer can be cured; but thinks that this article will cure very obstinate ulcers, mistaken for cancers. He states, that this article forms a part of the Indian *materia medica*, and is successful in their hands in healing wounds and curing obstinate ulcers. They use the powdered root, for this purpose.

MARANTA ARUNDINACEA.

ARROW ROOT.

A WELL known plant, cultivated in many parts of the country, particularly, in the Southern states. Of this plant, a fine jelly is prepared, which affords a very nutritious food, especially for children, when suffering under acute diseases. This jelly is also, an excellent remedy for bowel complaints, such as diarrhea and dysentery.

Recipe for making the jelly;—To a table-spoonful of the powdered root, add cold water enough to make it a thin paste, and then pour boiling water en it slowly, stirring it at the same time briskly, till it becomes a clear jelly; then season it with nutmeg and sugar: it may be rendered still more palatable, by adding a little wine or lemon juice. If the jelly is designed for children, it will be better to use new milk instead of water; and omit the wine, and lemon juice.

AREUTUS UVA URSI.

BEARBERRY, WILD CRANBERRY.

THIS is a low evergreen shrub, bearing some resemblance to the myrtle.

The leaves are very astringent, and bitter to the taste. So far as they have been tried, they have shown great virtue in relieving, the irritation of the stone, in cases of gravel; and in old cases of gonorrhœa excessive menstrual discharges, catarrhs and consumptions.

Dose—a tea-spoonful of the powdered leaves taken in hot water two or three times a day, or a tea-cupful of the decoction made of the fresh leaves, same number of times.

LAPATHUM RUBRUM.

STRIPED BLOODWORTH.

FOUND growing in upland woods, and on the sides of banks. Root small, tough, and fibrous. Stem rises from six to ten inches high; the top of the stalk is small and bare of leaves, on which grow out, small, purple flowers, which are succeeded by the bolls or husks containing the seeds. Its leaves are but three or four in number, and lie flat on the ground, hairy, full of winding, red veins.

A decoction of this plant, is said to be very useful in restraining an immoderate flow of the menses; also good for all other hemorrhages. Take a strong decoction of the roots, and add half the quantity of honey, and form it into a sirup by gentle boiling. Of this, a table-spoonful administered every two hours, is beneficial in consumptions, and violent coughs.

The expressed juice taken in repeated doses of a table-spoonful, and the bruised leaves applied in form of poultice to the wound, generally gives certain relief from the poisonous bites of snakes or insects.

GERANIUM MACULATUM.

CRANE'S BILL.

Root generally crooked and knotted, blackish on the outside, and reddish within; it has a rough taste, leaving an aromatic flavor behind. Stalks slender, growing from six to ten inches high, bearing seven long, narrow leaves at a joint. Found mostly in meadows, and low grounds in the woods.

This article is very astringent, and highly esteemed as a styptic. The powdered root, in doses of a tea-spoonful three or four times a day, or a decoction in milk,

used as a common drink, has been found an excellent remedy for excessive menstruation, whites, gleet and obstinate diarrhea.

Upon the authority of Dr. Mease, we give the following account of the efficacy of this plant.

Mr. David Cooper's son, near Woodbury, partially divided the artery at the wrist with the point of a hatchet; the wound bled profusely, and an aneurismatic tumor nearly as large as a bullet's egg, was quickly formed. One of the faculty, was immediately called in, who applied a tourniquet, and also a piece of flat lead to the tumor, all to no purpose. Thinking a surgical operation necessary, he requested the assistance of Dr. Shippen from Milford. In the arrival of that gentleman, the operation was resolved on; when the father of the patient informed him, that a valuable remedy should first be tried, which he said he learned from an Indian doctor.

He immediately went to the woods in search of the Crane's-bill;—he soon returned with some, pounded it in a mortar with a little cold water, and applied it to the part; in a short time, the bleeding stopped; and in a few days the wound was healed. Had it not been for this valuable plant, between the wound and the doctor's steel, the young man would have lost his arm, if not his life.

A similar application, to a wound made by a sythe on the ankle, which bled so profusely that the individual fainted before the poultice could be prepared, stopped the bleeding immediately. This plant has in numerous instances been tried, and has always proved to be one of the best articles in the compass of medicine to stop bleeding, and hemorrhages of all kinds.

In some sections of country, the people having witnessed its uncommon styptic powers, have cultivated this article in their gardens. This would be no bad policy, if generally practiced, for the accident it is intended to relieve, might not admit any delay, or might happen in the winter, when none of it could be found in the woods; but if transferred to our gardens it would always be at hand.

WHITE HICKORY.

THE bark of this tree is a good astringent, and detergent. The inside bark boiled over a slow fire, until all the substance is obtained; then strained, and boiled down to the consistence of molasses, forms an excellent salve for a wound; it will stop the bleeding, cleanse and heal the wound. A lint wet with the decoction of this bark, is perhaps better to check bleeding than the salve.

PERSIMMON.

A TREE well known in the United States. Both the bark and unripe fruit of this tree, are very astringent. A decoction of the inner bark, made with honey, is a valuable remedy for the sore throat or mouth. Made into a sirup with honey, it is said to be a good panady for the throat. An excellent poultice for the ulcers—bathe the fundaceous veins in decoction strong as can be made, or apply lint wet with it.

CREEPERS.

THE OAK.

WE have several species of the oak, as the white, red, black, &c. &c. The bark of either of them possesses, in a considerable degree, astringent, tonic, and antiseptic properties: the white oak is said to be the best. A decoction or infusion of the inner bark is an excellent article for chronic dysentery; and for lebility, of the system, and indigestion, as it gives tone to the stomach. Repeated instances have occurred, in which persons, especially children, have been reduced to mere skeletons by protracted bilious, and bowel complaints, whose

stomachs, had become so irritated that they would retain neither food nor medicine long enough to do much good, and were restored to health by bathing in a strong decoction of the oak bark twice a day.

The decoction of this bark combining the active properties of an astringent, tonic and antiseptic, renders it an excellent bath, used about milk warm, in the treatment of the small pox, particularly, the confluent kind. This mode has lately been successfully tried in several cases, after they had been pronounced incurable, giving them, at the same time, proper remedies internally, which the reader can see under the head of Small Pox, in our treatment of disease. This treatment, it is true, blackens the skin a little; but this temporary misfortune, is certainly out-weighed by the benefits resulting from the use of this bath. It promotes a more rapid restoration of health; and prevents the skin from being so badly disfigured by the disease.

ACHILLEA MILLEFOLIUM

YARROW.

Yarrow grows in dry pastures and along the sides of fences. It is also cultivated in gardens, in many sections of the country; its leaves are pointed; its flowers white, tinged with a little purple beneath.

The Yarrow is a good astringent; a decoction of the leaves in doses of a tea-cupful three or four times a day, is a useful article for the treatment of bowel complaints, as dysentery, diarrhea &c. It is esteemed as good to restrain or check any kind of hemorrhage, such as bloody piles, bleeding from the bowels, spitting blood, bloody urine, and an immoderate flow of the menses. The leaves and top pounded and applied to a bruise, gives relief in a short time. A plaster made by drying the expressed juice on a plate, until it hardens to a

salve, has been successfully employed for curing cancerous ulcers; the patient drinking the decoction at the same time.

NEVER WET.

THIS is a plant, said to be much used and highly esteemed by the Indians. We do not know the Indian name for it. This singular plant is found in the southern countries, growing in the water, particularly, in slow-running spring branches. The stem grows to the surface of the water, let it be what depth it may, before its leaf comes out, which always lies on the surface of the water; and is from six inches to a foot long, and two or three inches wide; its color is a light green, and its surface is remarkably smooth and glossy, as if covered with oil, so that water will not wet it;—hence its name, Never Wet. The whole leaf is very tender, thick and fleshy: bruised and applied as a poultice, it is an excellent remedy for burns, bruises ulcers, and the like.

CONSOLIDA.

COMFREY.

OF this plant, there are two kinds, the wild and garden comfrey. The wild grows about two feet high, and is found mostly in moist situations near springs; the leaves are large, resembling the water dock; flowers of a pale blue color; roots long, rather thicker than a man's finger, mucilaginous, black externally, and white within.

A handful of the roots boiled in milk, and given in doses of a tea-cupful, three or four times a day is a popular remedy for dysentery, bowel complaints, and flouribus or whites. It is a good remedy for strictures or burning in making water. Used as a common drink,

in clap or gonorrhea, it certainly has a salutary effect. An infusion in cold water, is highly esteemed as a common drink for pregnant women, who are troubled with the heart-burn. But few better remedies are found for strains, bruises and the like, than a poultice made of the pounded roots wet with vinegar.

LYNN TREE.

THE Lynn is found growing in all parts of America, mostly in rich bottoms. Wood soft, white and juicy;—the brak and twigs are the parts employed for medical purposes. The inside bark bruised and infused in water, yields a rich, well tasted jelly, but little inferior to the slippery elm bark. In flux, dysentery, diarrhea, it is a valuable remedy. It is also a good article for heart-burn or heat in the stomach, and weak bowels in pregnant women, giving immediate relief. The poultice is nearly as good for sores, burns, tumors, ulcers and the like, as the elm poultice.

AMYRIS GILEDENSIS.

BALM OF GILEAD.

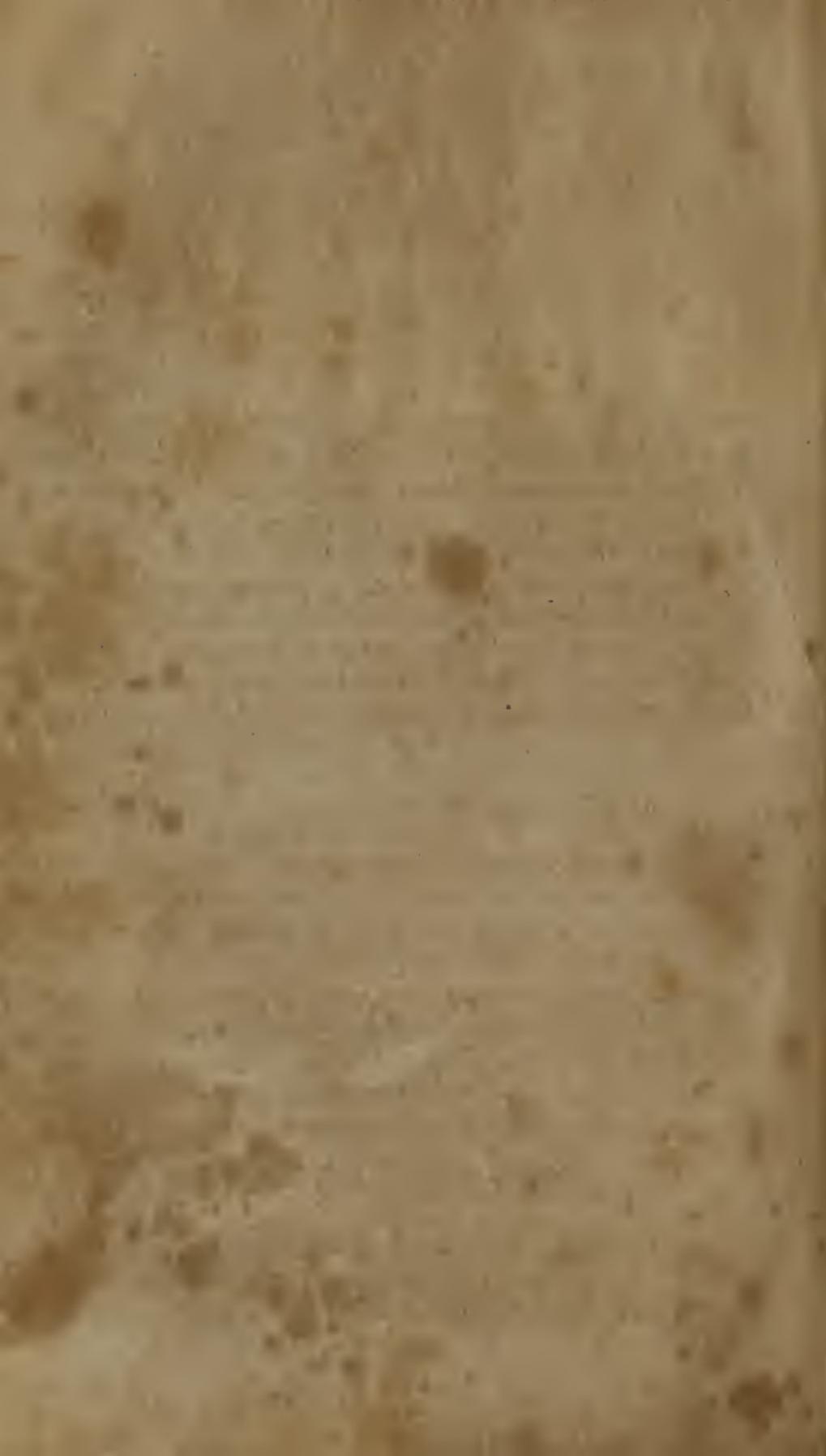
BALM of Gilead is a native of Asia, in Arabia and Canaan. That growing near Engedi in Gilead, was anciently esteemed the best; hence this tree received the name of the *Balm of Gilead*; and was esteemed as possessing remedial virtues for almost every disease. On this account the gum or balsam of this tree became a profitable article of trade among the ancients.

There is a species of this tree growing in America; but it cannot stand the cold climate of the Northern States. It is mostly cultivated as an ornament for a

yard, as it makes a beautiful shade tree;—yet it is more valuable for its medical qualities.

A tincture of the buds is esteemed a good remedy for bowel complaints, particularly, among children; it is also said to be an excellent remedy, for chronic rheumatism, particularly, for aged and debilitated persons. Gout and old venereal complaints, have often been successfully treated with the same article. For rheumatism, the tincture must be applied to the affected part, the patient drinking some at the same time.

The buds stewed in the suet of the deer or sheep, make a salve, that is found to be a most valuable remedy for healing wounds or ulcers; also for tetter, scald-head, burns, &c. Debilitated persons may drink an infusion of the buds with great advantage.



CLASS, NO. IV.

ANTHELMINTICS.

ANTHELMINTICS are medicines employed to destroy or remove worms. Children are frequently troubled with an excess of worms in the alimentary canal, when any disorder affects their system. Vegetable materia medica is not without some valuable articles of this class.

CHENOPODIUM ANTHELMINTICUM.

JERUSALEM OAK, STINK WEED.

THIS plant is found in every state in the Union, and is too well known to require any description.

This article has been long used both in Europe and America, as a medicine to expel worms. The oil has been used for this purpose, sometimes with great success, at other times with little if any. The root boiled with sweet milk, then sweetened with honey, has been recommended by some practitioners, as an infallible remedy for worms. Dose a tea-spoonful three or four times a day;—remember to give some gentle purgative, to move the bowels, after taking this sirup three or four times. The ripe seeds, or leaves may be used with success in like manner.

DOLICHOS PRURIENS.

COWHAGE, COWITCH.

THE Cowhage is an exotic plant, growing in hot climates. It produces a pod about four inches long, round, and about the thickness of one's finger. These

pods are thickly covered with hairs which when ripe, may be scraped off and mixed with molasses until it becomes as thick as honey. This is represented by those who have used it, as being one of the best vermifuges, acting mechanically upon the worms, penetrating and destroying them, without producing the least inconvenience to the patient;—a cathartic must follow to carry off the worms.

A decoction of the roots and pods is regarded as an excellent diuretic, surpassed by but few things in the compass of medicine: accounted a certain remedy for the dropsy.

MELIA AZEDARACH.

THE CHINA TREE.

THIS tree is a native of China, and was brought from that country to America; and is much used in the South as a common yard tree, for which purpose it answers admirably, being a most beautiful tree, and forming a dense shade.

The decoction of the bark of the root sweetened with honey, and administered, a table-spoonful every hour, till it operates, is said to be a powerful worm medicine; seldom failing to expel them. It not only acts as a vermicide to remove the worms, but it has a salutary effect in abating and removing, what is called the worm fever.

The pulp of the fruit stewed in lard is regarded as an excellent remedy for the scald-head, tetter, and the like.

SPIGELIA MARILANDICA.

CAROLINA PINK.

THE root of this plant is branched and very fibrous. Its stem is smooth and erect, bearing long, smooth, oval leaves, outer points acute. Its flowers are large, terminal, of a bright red outside, yellow within. Abundant in the South.

Carolina Pink is an active vermifuge; it also produces a cathartic effect. Its medical virtues were first learned from the Cherokee Indians.

A tea of this root, taken in the morning and at night, one or two tea-cupsful at a dose, is the proper form of using it. If it effect the eyes or head, discontinue the dose until the symptoms disappear.

POLYPODIUM.

MALE FERN.

Grows mostly in the woods, and in shady places; and flowers, generally, in July and August.

The root, when first chewed, yields a sweetish mucilaginous taste, afterwards, a bitter, astringent one.

This plant administered either in powder, or decoction, a pint a day, for three or four days, and followed on the next, with a cathartic, is esteemed a powerful medicine to expel worms. This treatment has repeatedly expelled the tape worm.

RUTA GRAVEOLENS.

COMMON GARDEN RUE.

THIS well known herb has an unpleasant smell, and a bitter, pungent taste. Employed in the form of tea, it is useful for persons of weak, inactive habits, in which the circulation is languid and feeble. It removes obstructions, promotes the secretions, quickens the circulation, and is useful for weak hysterical constitutions. Rue syrup made with honey or sugar, is generally administered to children with great success for worms. When worms produce violent pains in the stomach, administer the juice of rue sweetened with honey or sugar, and apply the bruised herb externally to the parts pained. This treatment rarely fails to produce the happiest results, generally giving relief sooner than any other remedy.

The rue poultice is also antiseptic, in a good degree; and is employed with great success to prevent mortification.

WORM WOOD.

GROWS about our yards, and along the road side in fence-corners; but is generally cultivated in gardens for its medical virtues.

The juice of this plant sweetened, administered in doses of a table-spoonful at a time, a poultice of the bruised plant, being applied externally on the stomach of the patient, is esteemed a valuable remedy for worms. The decoction is a useful drink for persons troubled with cramp colic, and for hysterical individuals; it is also useful for painful menstruation. The poultice is said to be a good article to prevent mortification, and heal up wounds, ulcers, and the like. Some practitioners recommend the decoction as being useful in the treatment of agues, fevers and jaundice.

CLASS, NO. V.

DIAPHORETICS.

DIAPHORETICS are a class of medicines, that promote perspiration, strengthen the living power, and give firmness to the muscular fibers. Sudorifics differ in nothing, from diaphoretics, only they promote a more profuse perspiration; hence they will both be placed in one class.

BOTROPHIS SERPENTARIA.

RATTLE WEED, SQUAW ROOT, BLACK COHOSH.

RATTLE WEED is found in every part of the Union, growing in rich open woods, particularly on rich hill sides. It is too well known to need description.

This plant constitutes an essential article in the Indian practice. Amongst them it is a popular remedy for rheumatism, fever, ague, and female obstructions. It has received the name of Squaw Root, from the circumstance of the Squaw's using it freely, and esteeming it very useful to promote child-birth. The Indians use it as an antidote for the bite of snakes, for which, they say it is a potent remedy; for this purpose they apply the bruised root in form of a poultice.

Rattle weed may be administered either in powder, tincture or decoction. It is sudorific, astringent, tonic, diuretic, anodyne and emmenagogue. This article forms a valuable remedy for the small pox. It has obtained great celebrity as a cure for coughs and consumptions. Many testimonials entitled to the fullest credit, have been furnished, clearly showing its efficiency in curing

diseases of that character, even confirmed consumptions have been cured by its use. Stubborn cases of diarrhea have been speedily cured by using the decoction of this plant.

Dose of the decoction, a table-spoonful, every two hours; of the tincture, from a half, to a tea-spoonful, three times a day; of the pulverized root, half a tea-spoonful. The decoction is accounted preferable to the tincture, as the tincture administered in large doses, sometimes produces temporary delirium, and other unpleasant symptoms.

CENTAUREA BENEDICT'A.

BLESSED THISTLE, HOLY THISTLE.

THIS is an annual exotic plant, cultivated in gardens; and is an excellent stomachic and tonic. An infusion of this article drank freely, produces a copious perspiration, and promotes the secretions in general. Leaves, flowers or seeds may be used. This plant is very bitter, and somewhat nauseous to the taste; and will act as an emetic, pargative and diuretic.

CUNILA MARIANA.

DITTANY, STONE MINT, SWEET BASIL.

THIS useful herb is found in most parts of the Union, growing amongst rocks, on dry knobs, hills and mountains. It has a yellow, fibrous, perennial root; and a smooth, slender, brittle stem, growing from six inches to a foot high, branched at top; branches nearly opposite. Leaves small, smooth, opposite; upper surface a deep green, and the under surface of a bluish green. Its flowers are small, numerous, a pink white or a bluish purple, forming terminal clusters or corymbs.

The whole plant has a warm fragrant, aromatic, pungent smell and taste, residing in an essential oil, which is easily extracted by distillation.

The whole plant may be used in a warm infusion or tea, and is advantageously used for colds, head-aches, hysterical affections, fevers, and in all cases in which perspiration is to be excited. This article is sometimes used as a tea at supper, by many persons, which is very wholesome. It is sudorific, tonic stimulant and nervine.

It is said that the bruised leaves applied to the wound, will cure the bite of a snake, the person bitten drinking the tea at the same time. Tie a bunch of the leaves on a stick, and hold them to the nose of the rattle snake, and it will die immediately: this circumstance led to the knowledge of its being a remedy for the bite of a snake. The Indians also use the bruised leaves for wounds; and the tea to facilitate child-birth, and expel dead children.

EUGENIA CARYOPHYLLATA.

THE CLOVE TREE.

THE clove tree is a native of the Molucca Islands; it is quite a tall, beautiful tree. The article known in this country by the name of cloves, is the unexpanded flowers, picked from the tree and dried. They have a strong, aromatic flavor, and pungent taste.

Cloves are sudorific and stimulant; but they are generally used in combination with other articles of the class of diaphoretics. The oil of cloves is often used to relieve the tooth-ache; put a little of the oil on some lint, and introduce it into the hollow of the tooth.

HEDEOMA PULEGIORIDES.

PENNYROYAL, SQUAW MINT.

This plant, abounds in every part of the country; and is so well known that we need not describe it. It is diaphoretic, and a warming stimulant, much used to promote perspiration. A strong decoction of this plant, is esteemed as a valuable remedy for female obstructions. The expressed juice of the pennyroyal sweetened with honey or sugar, is a good expectorant, and is useful for colds, coughs, and particularly for hooping cough. A decoction of the pennyroyal, is often used to advantage as a drink in promoting the operation of an emetic. A free use of the decoction, at the incipient or forming stage of a fever, often throws it off, giving entire relief from the symptoms. For common light family sickness, it is one of the best teas in the world.

LAURUS BENZOIN.

SPICE-WOOD, SPICE-BUSH.

SPICE-WOOD is found mostly in low, rich uncultivated lands; and is so well known, that we forbear describing it. The bark, leaves and twigs are a pleasant aromatic; and a tea of them, is often used to promote perspiration, for which purpose it answers extremely well. The tea is an agreeable beverage, and valuable in fevers, colds, dry coughs, hives, measles, and female obstructions. A strong decoction sweetened, loosens the phlegm or mucus, causing it to be thrown up from the lungs with ease. Drink freely of the tea, when you feel the first symptoms of a fever, and nine times out of ten, you will throw it off entirely. The berries boiled in milk, have been found a valuable remedy for the dysentery, and complaints of the bowels; often administered with success to expel worms. An oil made from the

berries is useful for bruises, colics, rheumatism and the itch, according to the testimony of Rafinesque.

MENTHEA PIPERITA.

PEPPERMINT.

THIS valuable herb is mostly found in low wet lands. It is hot and pungent; and is the strongest of all mints.

A tea of it, drank copiously promotes perspiration; and is useful to check nausea and vomiting; expel wind, relieve hysterics, and the like. This tea is very wholesome and cannot be used much amiss.

[MITCHELLA REPENS.

PARTRIDGE-BERRY, WINTER CLOVER, SQUAW VINE, CHECKERBERRY, ONE BERRY.

THIS is a small ever green vine, lying close to the ground. Its leaves are small and round, growing out opposite. Flowers in pairs, which are white and downy within, succeeded by light scarlet red berries. It is mostly found in shady woods, often growing in beds or mats.

The checkerberry is diaphoretic, diuretic, and astringent. A decoction of it made with new milk, as a diaphoretic, promotes perspiration, as a diuretic, it increases the discharge of urine, and as an astringent is a remedy for diarrhea, piles, &c.

It has obtained the name of Squaw vine, because the Indians in the west part of New York, use the tea of it freely to facilitate child-birth; and by using it two or three weeks before, that dreaded event is rendered remarkably safe, and comparatively easy, with them.

XANTHOXYLON CLAVIS HERCULES.

SEA-ASH, TOOTH-ACHE TREE, PRICKLY
YELLOW WOOD.

THIS tree grows in the Southern States, where it is so common and well known as to need no description. Its bark, which is the part used as a medicine, is a most powerful, pungent, warm aromatic; and the article certainly deserves a place in Botanic *materia medica*.

The pulverized bark forms a valuable part in diaphoretic powers; it is also dinretic, and is a valuable article in the treatment of the dropsy, and may be advantageously administered in addition to other articles advised under that head.

This article is one of the most powerful sialagogues known in *materia medica*; it will produce a most abundant discharge of saliva, in cases of the most extreme dryness of the mouth, when the best African cayenne will scarcely produce any effect. This renders it a most valuable medicine in ardent fevers, where the mouth and throat of the patient are dry and parched; for small portions of this powder, occasionally put into the month, will produce moisture in the mouth, giving immediate relief to all those symptoms produced by a dry and parched mouth and throat. It is also highly esteemed in the treatment of sore throat.

A mixture of this powder with pulverized lobelia, the proportion of six parts lobelia to one of this, requires much smaller doses to produce vomiting, and has also a salutary effect. Dose of this mixture, for most patients, from one to two tea-spoonsful.

INDIAN ANODYNE ROOT.

THIS plant is called *Long-root* by the Indians. The root is perennial, large, branched, sending off fibers; the root has pits or scars remaining where the old stems

grew. Several stems grow up from one root:—they are round, smooth and shining, rising from two to three feet high. Flowers are a deep blue. Leaves are smooth, long and pointed. Generally found growing in rich up-lands, and in bottom lands.

The Indians use this root in strong tea, and if drank freely, promotes perspiration; it is also an excellent bitter tonic. They consider this as one of their best articles of medicine. They use it with great success in curing sharp, darting pains, pleurisy, and the like.

INDIAN CUP-PLANT.

THE Indian cup-plant has a perennial root, that is, one which lasts more than one year; it is large, long, crooked, and forms a joint where the old stalk grew, which leaves a hole in the root when it decays; from each of these joints, issue fibers. Stem rises to the height of seven or eight feet, square, with the sides concave, making the corners very sharp. Leaves are very large, opposite, and indented on the edges with deep, large teeth, united at the base, with the edges so raised as to form a cup, which might contain a spoonful or two of water. Found mostly in rich interval or bottom lands.

This article is much used by the Indians to promote perspiration; especially when they steam or employ the vapor bath: it is also tonic, or restorative in a high degree. They say that, if the use of the decoction be persevered in, it will give to decrepit age, the vigor of youth. It is very useful for weakness, inward bruises, agues, fevers &c. Indian doctors assert that it will dissolve and carry off ague-cakes, cure intermittent fevers, &c. The root requires long steeping to extract its strength.

INDIAN SANICLE.

THIS plant has a small, fibrous, black root, which sends up several naked stems, bearing at the top, five leaves in a whorl. The scape or stem bearing the flowers, rises considerably higher than the stalks which bear leaves only, having two or three whorls of small leaves near the top, and crowned with flowers in terminal corymbs.

This plant used in a tea, promotes perspiration; and is esteemed an infallible remedy for the bite of the rattle snake. The mode of treatment is; drink of the decoction of the root, in half tea-cupful doses, at intervals of thirty minutes, and bathe the bitten part with a decoction of the leaves, and stems, or apply a poultice of the bruised leaves to the bite. This treatment rarely fails in their hands, to effect a speedy cure, although the person were bitten two days before the application.

The Sanicle is also successfully employed for the cure of the sore throat, croup, hives, fever, &c. They regard it as very valuable for fevers in general. Its medical virtues are certainly worth attention.

SWEAT ROOT.

Root is small, having many fibers, of a dirty white color, all growing from one common head. It has many leaves, which grow out from the root on long petioles or foot stalks, which grow from six to sixteen inches in length, reclined or spreading out, the inner or upper side of the foot stalk being channeled its whole length; the edges each bearing many oblong ovate folioles or little leaves arranged in rows. Flowers are small and blue, appearing early in the season, succeeded by small seeds. Found growing mostly in moist, though not swampy lands.

Indian practitioners first discovered the medical vir-

tues of this root. They prepare a strong decoction of the roots, and drink it freely in fevers, pleurisy, and all cases where they wish to produce a copious perspiration.

A decoction of the roots, taken in doses of a wine-glassful three times a day, is an excellent article to purify the blood and cleanse the system of vitiated humors. The tincture is made by infusing a handful of the roots in a quart of spirits.

BUTTON SNAKE ROOT.

FOUND mostly in the Southern States, growing in poor pine lands; the root is bulbous, sending out numerous fibers, of a pungent, nitrous taste. Its leaves are long, narrow, pointed, and indented or saw-edged. Stem two or three feet high, bearing in autumn, prickly, globular flowers, of an ash color, which are thought to bear some resemblance to buttons of an old fashion; hence its name button snake-root.

A decoction of this root is a most powerful sudorific; but for foul ulcers, and cases of gangrene or tendency to mortification, it is a superior remedy; employed in the form of a poultice, by boiling the root soft, and drinking the tea at the same time. The pulverized root is a good sialagogue; the fresh root chewed has the same effect.

SQUIRREL EAR, EDGE LEAF.

MOSTLY found in the Southern States, growing on barren, pine lands. By some, it is considered a species of the sage. Stem rises from one to three feet high; and its leaves both in color and shape resemble the squirrel's ear, although larger; they also present their edge to the sun, instead of their surface like other leaves do. Flowers white and fuzzy.

The expressed juice is an efficient antidote to the poison of a snake bite. It is said, that a wine-glassful of the juice, rescued an individual from death, who had been bitten by a rattle snake, after he was so far gone as to be incapable of speaking.

HEART LEAVES

THIS very common plant, has a pleasant smell, and a pungent taste, not very disagreeable. It is a pleasant diaphoretic, and stimulant.

An infusion of the leaves and roots, taken in doses of a tea-cupful, three times a day, is useful to relieve hysterical or nervous debility, and strengthen women of sexual weakness. It has also been used with great advantage, by young women whose periodical courses had not been properly regulated; and likewise, by old women whose monthly courses were about leaving them according to the laws of the human constitution. A tea made of the whole herb, drank warm, in large quantities, is serviceable in typhus fevers, and in chronic ague and fever, especially, if taken just before you feel the shake coming on, and continued until you are in a profuse perspiration. It is also successfully employed in colds and coughs.

SAPONARIA OFFICINALIS.

SOAP-WORT.

SOAP-WORT grows in moist swamps and meadows,—abundant on the Ohio river. It rises about a foot high; the leaves are pointed, and have three ribs; its flowers are large, of a pale pink color, and very numerous.

A decoction of this plant, made by boiling a hand-ful

of the leaves and top, in three pints of water, down to a quart, is a gentle diaphoretic. It has acquired great celebrity for its efficacy in curing the jaundice, and removing obstructions of the liver; and it has also been employed with success in the treatment of the venereal. Dose, a tea-cupful three or four times a day.

An infusion of this plant in warm water will remove dirt off of the skin, it is said, equal to soap and water; and in fact, where it grows plentifully, it is often substituted for soap-suds in washing clothes; hence its name soap-wort.

SHELL-BARK HICKORY.

THIS tree generally grows in strong or good soil; and is found in most parts of the United States, except in sandy soils where pine abounds.

The ross or outside bark of this tree, makes one of the best diaphoretics, or sweating medicines, for ordinary purposes, that we have. A decoction of the dry, outside bark, not only acts as a diaphoretic in producing perspiration, but it also corrects the bile, and invigorates the stomach; hence the free use of this simple article, in the first stage of the fever, will throw it off entirely. It is also an excellent article to remove a cold; and in short, it may be advantageously employed in any case where diaphoretics are needed. From repeated trials of its virtue, we have no hesitancy in recommending it to the public.

CLASS, NO. VI.

DIURETICS.

THIS class of medicines, exert an influence upon the urinary organs, producing an increased discharge of the urine. They are valuable in the treatment of the dropsy, and all disorders of the urinary organs which prevent the secretion of the proper quantity of urine.

APIUM PETROSELINIUM.

PARSLEY.

THIS well known plant is mostly cultivated in our gardens for culinary purposes; but it also possesses important medical properties.

Parsley is considered a good diuretic; and has been employed with some success, in all ordinary cases of suppressed urine, inflammation of the kidneys and bladder, dropsy, and the like.

Dr. Chapman avers, that he cured a case of ascites or dropsy of the abdomen, even after the patient had been twice tapped, by a free use of the decoction of this plant,

ARCTIUM LAPPA

BURDOCK, CLOTBUR

THIS plant grows in every part of the country and is well known.

It has often been employed with great success as a

diuretic, promoting an increased discharge of urine; it is also diaphoretic, producing a profuse perspiration. The decoction of the root is less powerful, and less valuable than a decoction of the seeds. A constant drink of this article is said to be an excellent remedy for cutaneous complaints, as it cleanses the blood, carrying off its impurities, through those emunctory organs, whose secretions it promotes: viz. the urinary organ, and the cutaneous transpiration. Some respectable practitioners assert that they have successfully employed the decoction of the seeds as a remedy for rheumatism, scurvy, gout, inflammation of the kidneys, and the venereal. The seeds of the Burdock combined with lobelia administered in small doses, forms one of the best diaphoretics, to cleanse the blood of all impurities, that *materia medica* comprises. A poultice of the leaves applied to the feet is very useful in the treatment of febrile diseases.

ASCLEPIAS SYRIACA.

SILK WEED, MILK WEED.

THE silk weed is found in all parts of the country. It bears a large pod, containing a silk-like substance, which the ingenious ladies, in some parts where it is most abundant, mix with cotton, out of which they make splendid gloves, stockings, &c. This substance has also been manufactured into paper, and into hats; it also makes a very downy bed, used instead of feathers.

The root of the silk weed, says Dr. Smith, is a powerful diuretic, sudorific, and emmenagogue. He also regards it as an effectual remedy for the dropsy, gravel, &c. The decoction is made by boiling six ounces of the dry root in a half gallon of water; of this decoction take a gill four times a day, increasing the dose according to the effects. Some Indians use this as an emetic.

The silk weed, though not so strong, possesses nearly the same properties, that the Pleurisy Root does.

CHELIDONUM MAJUS.

CELANDINE, TOUCH-ME-NOT.

THE Celandine is an annual plant, growing mostly in moist rich lands, from two to four feet high, branched, having large joints at the origin of the branches; the whole plant is of a tender, watery, transparent appearance. Its leaves are alternate, and pinnate, having the middle portion much the largest. Its flowers consists of four yellow petals or leaves, succeeded by pods, which, when full ripe, will suddenly burst or fly to pieces, and scatter the seeds, if touched; hence it is commonly known by the name Touch-me-not.

Celandine is said to be a good diuretic, useful for suppressions of urine, dropsy, and gravel. A tea of this article is highly recommended, by respectable practitioners, as a remedy for the jaundice. The expressed juice has been repeatedly employed with great success, for removing ring-worms, salt rheum or tetter; and for cleansing and healing foul ulcers. A poultice made by boiling the plant in new milk, is considered equally as good, as the expressed juice, if not better, for external applications.

Dr. Beach, author of the "American Practice," recommends the ointment made by boiling this plant in hog's lard, for the piles.

The tincture is made by digesting two ounces of the plant in a quart of spirits, which may be used instead of the tea.

COLLINSONIA CANADENSIS.

RICH WEED, RICH LEAF, OXBALM,
KNOT-ROOT.

RICH-WEED is found in most states in the Union, though it is scarce in the South and West. Its root is

perennial, hard, rough, knotty and fibrous. From the root springs up a round, straight, erect stem, from one and a half, to two and a half feet high, dividing into several branches at the top, on which grow the flowers and seeds. It has but few leaves, not more than two or three pairs on a stem; they grow out opposite or in pairs, and are broad, large and thin.

The rich-weed is diuretic, tonic, stimulant, carminative; and is highly prized as an external application, in the form of poultice, to sores, painful parts, swellings, poisons, head-ache, &c., drinking a tea of the leaves at the same time. The plant may be used fresh or dry; and is a useful medicine for suppression of urine, dropsy, indigestion, colic, cramp, and head-ache, when produced by a disordered stomach.

CONVOLVULUS PANDURATUS.

WILD POTATOE. MAN-ROOT, BIND-WEED, KUSSANDER.

THE wild potatoe has a perennial root, which grows very large, sometimes more than three inches in diameter, and two or three feet long, branched at the bottom, exhibiting a rough appearance, having fissures or grooves running lengthwise.—the root is of a yellow color, containing a milk-like juice. Its stem is a climbing vine, running from three to twelve feet long, and is of a purplish color. Its leaves are alternate, somewhat fiddle-shaped, of a deep green on the upper, and pale on the under side. Flowers are white or purplish, resembling the morning-glory. The wild potatoe is found mostly in open grounds, and in sandy, poor or loose soils.

The root of the wild potatoe may be used either in powder, decoction, extract or sirup. It is diuretic, expectorant and cathartic; and is useful in gravel, dropsy, suppression of urine, coughs, asthma, consumption, &c.

The extract of this root is considered a very valuable cathartic, equal to rhubarb or scammony.

CUCURBITA PEPO.

PUMPKIN.

It would be superfluous to describe any thing so generally known as the pumpkin. A decoction of the seeds has been highly recommended as a diuretic; and has often been employed with great success in curing complaints for which diuretics are recommended. The oil of pumpkin seeds, however is much better than the decoction. Dr. Smith, who, has made great use of it, says, "It is perhaps, without exception, the most certain and most efficient diuretic we possess" giving immediate relief to spasms of the urinary passage, and scalding of the urine. Of the oil, he administered from six to twelve drops, three or four times a day, or oftener, if the case required.

ERYNGIUM YUCEFOLIUM.

CORN SNAKE ROOT, RATTLE-SNAKE'S MASTER.

THE corn snake root, generally grows in great plenty in the prairies of the west. Its root is perennial, nearly bulbous, about an inch in length, the lower end decayed, giving off many fibers. From the root rises a round, smooth stem, about two feet high, bearing on its top, a large ball, which is covered with a white bloom. Leaves are scattered, long, resembling the blades of corn, having little spines or prickles on the edges, and one at the extreme point.

The root is extremely pungent to the taste, possessing most powerful medical properties.

The corn snake root is diuretic, stimulant, expectorant, and antiseptic, being an active remedy for the bite of snakes, or any other poisonous bites or stings. The mode of treating a poisonous bite or sting, is to bruise a portion of the root and apply it to the bite, and drink some of the decoction, or chew some of the root and swallow the juice. This it is said, is a certain and speedy cure.

When this root is employed in the treatment of dropsy, gravel, &c. the tea of it should be combined with a decoction of the columbo root, or some bitter tonic; or if preferred, the patient may take them alternately, drinking the first day of the snake root, and the next of the tonic. Some practitioners recommend this last mode, as being the best.

GALIUM APARINE.

GOOSE-GRASS, CLIVERS, CLEAVERS.

GOOSE-GRASS generally grows in moist places, from two to three feet high, having a slender, square stem, with many joints, and dividing into branches at top; it is rough with sharp teeth or prickles; from each joint grows out six small leaves. Its Flowers are small and white.

A strong infusion of this plant in cold water, drank freely is said to be very useful for dropsy, gravelly complaints, and all obstructions of the urine. Dr. Smith states that he has found it an excellent and speedy remedy for suppressions of the urine, and gravelly complaints. The extract is a powerful discutient.

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JEFFERSONIA ODORATA.

TWIN LEAF.

TWIN LEAF has a small perennial root, full of fibers. It has many leaves, which grow on long petioles or foot-stalks divided into two equal parts; hence the common name Twin Leaf. The scape or flower stalk produces but one single, white flower.

The Indians employ this plant as a diuretic in suppression of urine, dropsy, &c. It is also used among the whites as a successful external application to sore eyes, ulcers, and the like. The mode of using it, is either in tea, tincture or sirup. The medical properties of this article, are certainly worthy of farther investigation, as its sensible qualities indicate active properties.

HUMULUS, LUPULIS.

HOPS; HOP VINE.

THIS article is too well known to need any description. It possesses some narcotic power, as is clearly perceived by its administration being generally followed by a gentle sleep. Its narcotic effects, however, differ very materially from those of opium, as it does not induce that languor and debility, which always follow the use of opium.

The hop is diuretic, and has been recommended with satisfactory testimonials, as a remedy for inflammation of the kidneys, and gravelly complaints. A strong infusion of the hops, it is said, proves a certain solvent of the stone out of the body. It has been asserted by high and respectable authority, that it seldom fails to alleviate the pain, and increase the secretion of urine, when taken internally.

As it has been ascertained that the infusion of hops

will dissolve the calculus or stone out of the body, it is thought, that it might be successfully employed by injecting it into the bladder, and bring it in immediate contact with the calculus or stone. For this purpose introduce a catheter and draw off the water; then fill a bladder with water, about milk warm, and tie the neck around the end of the catheter, and inject it into the bladder to wash it out; and then let it pass off through the catheter. In the same way, inject an infusion of the hop blood-warm, and let it stay a half an hour, if the patient can bear it, then let it pass off. If the hop infusion produce irritation, add a little flax-seed tea, or slippery elm tea. This course persisted in, it is thought, will dissolve and remove the stone in the worst cases of gravel; and surely it is much safer, and less painful, than the dreadful operation of cutting it out!

Hops make a valuable external application, for pains, particularly, for the spasmodyc kind. It is also a good anodyne application to cancers and other painful ulcers.

JUNIPERUS COMMUNIS.

JUNIPER TREE, OR BUSH.

THE Juniper is an ever-green bush, growing on dry, barren commons, and hilly grounds; and is found both in the United States and Europe. And it is worthy of remark, that no grass or herbages will grow under this shrub.

A strong decoction of the tops and berries, in doses of a tea-cupful three or four times a day, has long been esteemed as good for dropsy, scurvy and gravel or difficulty of urine. The oil of Juniper, made from the berries, possesses the same properties, in a high degree, and is the article that gives gin its peculiar flavor, and its diuretic property.

LEONTODON TARAXACUM.

DANDELION.

This well known, and valuable plant, grows in meadows, pastures, along road sides, and on the banks of ditches.

We present the reader with an extract from the "Medical Botanist," on the remedial virtues of this plant, which we esteem an authority, entitled to respectful consideration.

"**DIURETIC.**—Producing an increased secretion of urine, and serviceable in many of the nephritic affections; and aided by this article, nature employs the emunctories of the venal organs to carry off the more serous part of the blood, which in these diseases is very considerable; thus reducing excess of action in any particular organ."

"**TONIC.**—It is a valuable strengthening medicine in all cases of debility, but especially, such as are connected with much nervous irritability, where tonics are generally inadmissible. To the dyspeptic, (especially if nervous,) I would say try it *perseveringly.*"

"**DIAPHORETIC.**—Promoting an increased exhalation from the external surface, and sympathetically influencing almost every function in the animal economy—directly relieving congestion by equalizing excitement and circulation:—applicable to almost every form of febrile and inflammatory action."

"**ANTISPASMODIC EXPECTORANT.**—In pulmonary diseases, I have found the dandelion an invaluable remedy. I believe I will venture one prediction; if ever one article cures a confirmed consumption, it will probably prove to be this. Possessed of such active, and extensive medical properties, which may be so managed in its exhibition, as to produce almost any effect, to any desired extent, on any organ or set of organs in the animal machine,—what may we not expect from it? In asthma and catarrhal coughs, let those who *persevere* in its use, judge for themselves."

"APERIENT.—Moderately purgative; and is perhaps one of the best articles we can resort to with any expectation of a radical cure in cases of constipation from biliary obstructions, or deficient peristaltic action. To increase its cathartic effects, add some of the common blue flag."

"ALTERATIVE.—In no one point, do I esteem the dandelion more valuable than in this, especially on the biliary system.— I consider it much better adapted to chronic than acute forms of disease."

My common form of employing it, is the expressed juice of the herb, top and root, obtained any time in the spring or summer; or a decoction of the roots obtained in autumn."

From the above account it appears that the medical properties of the dandelion may be augmented, and its specific effects rendered more active by combining with other articles, whose peculiar action on the system is known to be such as will facilitate the production of the desired effect.

The juice of the stem removes freckles.

LINUM USITATISSIMUM.

FLAX.—FLAX-SEED.

FLAX is cultivated extensively in many parts of the United States, for domestic purposes. This valuable article, so far as we can learn, came first from Egypt.

Flax-seed tea is both diuretic and expectorant; and is a valuable drink for persons afflicted with violent coughs, colds, difficulty or burning in making water. The flax-seed sirup is a most valuable medicine for diseases of the breast and lungs, taken in doses, for adults, a table-spoonful every hour, if the cough be troublesome. The sirup is made by adding a pint of honey to a quart

of strong tea, and simmering slowly, over a gentle fire, for an hour, taking off the scum as it rises. Bruised flax-seed forms a most excellent emollient poultice.

LOBELIA SYPHILITICA.

BLUE LOBELIA, BLUE CARDINAL FLOWER, HIGHBELIA.

BLUE LOBELIA is found in most of the Western and South-western States growing in wetish lands. Its root is perennial, white, full of fibers, containing a milky juice; and sends up an erect stem, somewhat angled, hairy towards the top, growing from one to three feet high, terminating in a spike of densely clustered, large, pale blue blossoms. Its leaves are large, milky, diminishing in size towards the top, finely indented on the edges with unequal teeth.

The root is the part used for medicine, and is said to be diuretic, cathartic, sudorific, emetic and anti-syphilitic. Dr. Chapman says, that it is often successfully used as a remedy for the dropsy. The pulverized root taken in doses of a tea-spoonful in water, has been, by good authority highly recommended as a certain remedy for diarrhea, and dysentery. Highbelia is seldom used as an emetic, not being much esteemed for that purpose.

SPEARMINT.

SPEARMINT grows generally on the banks of streams, and in wet lands. It has a strong, aromatic smell and a warm, rough, bitter taste. This plant may be used either in decoction, oil, or essence; and is quite useful to relieve sickness at the stomach, check vomiting, or expel wind from the stomach.

Dr. Beach directs to take the green spearmint, bruise it, and add enough of the fourth proof Holland gin to make a saturated tincture, which he says, makes a remarkably efficacious remedy for suppressions of urine, gravelly affections, &c.

Dose, a wine glass-ful taken as often as the patient can bear it. Cotton wet with this tincture makes a valuable application to the piles, giving immediate relief.

RHUS GLAERUM.

SUMACH.

SUMACH is a shrub well known in the United States. There are two kinds the black and white, both good though some practitioners prefer the white, others recommend the black. The bark of the white sumach is more an ash color than that of the black: the root of the black sumach is of a darker color than the other is.

Sumach is diuretic, antiseptic, cathartic, tonic, dia-phoretic, and astringent. The bark, leaves and berries, may be used in decoction: the bark of the root is purgative. A strong decoction of this article is good to promote the discharge of urine, relieving the difficulties of the kidneys, strengthening the urinary organs, and healing ulcerations of the bladder.

Dr. Torrey considers the bark of the root, one of the best antiseptics he is acquainted with. He says that corroding ulcers, which defied every common application, immediately yielded to the sovereign remedial powers of the sumach poultice, washing the ulcer often with a strong decoction of the bark of the root. This treatment is said to be equally efficacious in scrofula or king's evil. A decoction of the berries is said to be a valuable tonic in chronic fever and ague. The sumach poultice is made by boiling the bark of the root in new or sweet milk until it is very strong, then strain out the bark,

and thicken the decoction with rye flower, or if it cannot be had, with meal.

Sumach ointment is one of the best remedies, we ever tried, for sore and swelled breasts. Take the inside bark of the root of the black sumach; and stew it in lard or fresh butter, until all the strength is extracted; then apply the ointment to the affected part, and instant relief generally ensues.

The following prescription, it is said, rarely fails to cure the venereal of the most stubborn character; instances of its efficacy could be produced, that would stagger incredulity itself.—Take of the inside bark of pine, swamp elm, and sumach root, equal portions of each, and make a strong decoction, which is to be taken in half pint doses three times a day, keeping the bowels open by cathartics or injections. If the disorder has broken out in ulcers, they must be washed repeatedly with the same decoction. This treatment is recommended by respectable practitioners as being particularly well adapted to patients of weak habits and to those, who have frequently been the victims of this loathsome, distressing disease.

SAMBUCUS NIGER.

ELDER, SWEET ELDER.

THE common elder grows so plentifully, and is so well known in this country, that we deem any description of it superfluous. The bark, flowers, and berries, are used as medicine, and are diuretic, cathartic, and emetic.

A saturated tincture of the inner bark is highly recommended as a remedy for the dropsy by those practitioners who have tried it. The tincture is made by digesting two hands-ful of the inner green bark of the common elder, in a half gallon of wine, twenty four hours; it is then ready for use. Dose, one gill twice a day; and increase the quantity if the stomach will bear

it, until relief is obtained. This tincture is a certain diuretic, producing an increased discharge of the urine.

A decoction of the flowers, is a mild purgative anodyne, very useful for complaints among children. An ointment made by stewing the inside bark in lard or fresh butter, is a valuable application to burns, and most eruptions of the skin. The boiled bark has often been successfully applied to the cheek for the tooth-ache.

SPIREA ULMARIA.

QUEEN-OF-THE-MEADOW, GRAVEL ROOT.

THIS plant has a long, fibrous, white or brownish colored root, which remains in the ground all winter. Several stems grow out from the same root, to the height of four and even six feet, round, smooth, jointed, of a purple color around each joint, bearing many, pale reddish blossoms in terminal corymbs. Its leaves grow in whorls, at the joints, large, and indented or jagged; from three to five in a whorl. Found growing mostly in wetish ground, and sometimes, though rarely, on high, dry land.

The root of this plant is a most powerful diuretic, useful in all diseases of the urinary organs, dropsy, gout, rheumatism, and female obstructions. A strong decoction of the root, which is the plan of using it, is considered by some eminent practitioners, as an unfailing remedy for gravelly complaints; and that it dissolves the calculus or stone, and carries it off with the urine. It is no doubt, a very valuable medicine, in complaints of this kind, whether it will dissolve the stone or not; and it is well known that it is a good remedy for the peculiar weakness of females.

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URTICA DIOICA.

NETTLE.

THIS well known weed, which by many people, has been looked on as a useless annoyance, has, so far as it has been tried, exhibited some active remedial virtues.

It is diuretic, astringent, and tonic; useful for inflammation of the kidneys, gravel, pleurisy, spitting of blood, and all hemorrhages. The juice is said to be a most powerful styptic. Dose of the decoction, one tea-spoonful three times a day: the seeds are the best part of the plant;—flowers next best.

NEPHRITIC PLANT, CUTTING ALMOND.

THIS valuable plant has singular roots. They all issue from one common head or caudex, running horizontally in the ground; at the end next to the caudex, they are small but gradually enlarge, until they terminate abruptly, then giving out another of similar form, each portion forming a distinct root, which in shape, and size, resembles a young radish with the large end foremost, giving off a few fibrous roots, and sending up stalks from the large end of the principal roots. Stems are hard, round, of a dark red color, from one and a half to two feet high, branched near the top, branches axillary to the leaves. Leaves scattering and few, harsh and stiff, obtusely dentate, lower ones petiolate and largest, upper ones partly clasping the stem, smaller than the lower one, and nearly diamond-shaped. Flowers grow on the extremities of the branches, white and partly cymous or umbelliferous.

Cutting almond is a powerful diuretic, highly esteemed in all nephritic complaints. The roots sliced and steeped in cold water, makes an excellent drink, to relieve suppressions of urine, especially when a painful, scalding, or burning sensation attends its discharge.

DAUCUS CARATO.

WILD CARROT.

THE wild carrot is found growing mostly in meadows and low lands. It grows from two to three feet high, and flowers in July. The seeds have an agreeable aromatic smell, and a slightly warm, pungent taste.

A strong decoction of the seeds, taken in doses of half a tea-cupful, every hour, is said to be very serviceable in relieving suppressions of urine and suppressed menstruation.

The root of the garden carrot is an excellent antiseptic, as well as diuretic. The boiled roots beaten into a pulp form an excellent poultice, for cancerous ulcers, and old sores. A marmalade of carrots is said to be good for scurvy, particularly, that kind called sea scurvy.

ANNAGALLIS PHENICEA.

RED CHICK-WEED, PIMPERNEL.

THIS plant is, so far as known, a native only of Maryland, and Havre de Grace; but is cultivated in many gardens, in many parts of the United States.

Chick weed is diuretic; but its chief celebrity is derived from its efficacy in curing the bite of a mad dog. Some years since a committee of the Legislature of Pennsylvania, appointed for that purpose, made report that the Red Chick-weed was a specific for that most dreadful disease, the hydrophobia; and said report was founded on facts, contained in the deposition of Valentine Kittering.

Dose for adults, is a tea-spoonful of the powdered leaves; for beasts the dose is much larger, this article being equally efficient in curing them.

POOR ROBIN'S PLANTAIN.

THIS valuable plant grows in low ground, near brooks, and in hedges, rising to the height of five or six feet, climbing on bushes near it. The upper side of the leaf is white, armed with sharp prickles. Its flowers are small, and divided into four segments, which are succeeded by a fruit rather large, composed of two berries, slightly adhering together, and covered with hooked prickles, containing two seeds.

A decoction of the leaves is highly celebrated for its active diuretic properties, being a most valuable remedy for suppressions of the urine, and for all gravelly complaints. It is also said to be good for the scurvy, spitting of blood, epilepsy, or fits. Dose, a tea-cupful every two hours until relief is obtained.

ARTHETICA.

GROUND PINE.

GROWS mostly in strong ground, and rises about six or eight inches high, dividing into many small branches. Leaves are small, narrow, grayish, and somewhat hairy. Its flowers are of a pale color, growing from the joint of the stalk, among the leaves, succeeded by small, round husks.

The tincture of this article, made by steeping a handful of the leaves and flowers in a pint of wine or Holland gin, and taken in doses of a half gill, three times a day, is a good diuretic, and said to be a valuable remedy for uterine obstructions, rheumatism, scurvy, and gout.

pages 209-212 missing

ALEX VOMOTORIA.

SOUTH-SEA TEA, YAUPON.

THIS shrub grows in great abundance in the Southern States; and generally attains the height of twelve or fifteen feet, having many slender, upright, stiff branches, covered with a whitish, smooth bark; its leaves are small, ever-green; indented or saw edged; flowers small, white, growing promiscuously among the leaves, and are succeeded by small berries, which become red in October, and remain so all winter.

An infusion of the leaves of the Yaupon, is considered, by those who are accustomed to it, as palatable as Bohea tea, and when freely used, is a powerful diuretic, and has been found a most valuable article in the cure of dropsy, and suppression of urine. This article would be the most suitable diet drink for persons laboring under any of these complaints.

Among the Southern Indians, this tea is held in high repute. They toast the leaves, and make a decoction of them, which they call the black drink.

An article so valuable, both as a diet, and medicine, ought to be found in every store; merchants need have no fears about selling the Yaupon.

FRIGARIA.

STRAWBERRY.

THIS little well known plant bears most delicious fruit, of a cooling laxative nature.

Strawberries are both diuretic and antiscorbutic; retained in the mouth for some time, it is said, they will dissolve the tartareous concretions on the teeth. A free use of them is of great service in scurvy, and a preventative of the calculus or stone in the kidneys; they are regarded as valuable aperients, in suppression of urine, visceral obstructions, and jaundice.

The young strawberry leaves are slightly bitter, astringent, and styptic. An infusion of them, gathered and dried in the shade, has been employed with advantage in laxity and debility of the intestines; and in hemorrhages.

SMART WEED.

THIS weed grows about yards, barns, and in corn fields; and is well known to every farmer. Of this weed there are two kinds, distinguished as the great white, and little red. The red or small kind, has a pungently acrid, biting taste. The large white kind, has an inoffensive taste, accompanied with no strong sensation; but both the stems and leaves are full of a slippery, mucilaginous substance. A decoction of this kind, is said to be very useful in gravel, and suppression of the urine, and especially strangury, or painful discharge of water. A decoction of the small red kind, is said to be a valuable remedy for discharges of bloody urine;—this kind is frequently employed by farmers, in warm weather, to preserve fresh meat from the flesh fly.

COCK-UP-HAT, CLAP WEED.

THIS plant has a small, dark, fibrous root, which has an uncommon, pungent, biting taste, producing a great flow of spittle. The stem grows from one to three feet high, bearing, small, rough, pointed leaves, rather oval; its flower is cymous or umbeliferous, being more bulbous or round on the face than the sun flower; of a purple color, and about the size of a thumb.

Either in tincture or decoction, this root is a specific for the venereal or clap, in its worst forms, having never been perseveringly employed without success. Under the head of this disease, in our treatment, will be found the method of preparing and using this article.

ERIGERON PHILADELPHICUM.

FLEA-BANE SKERISH.

Dr. BARTON says this plant is very common in many parts of the United States; and that it is diuretic, sudorific and emmenagogue. An infusion or decoction of this plant, operates in a very happy manner, producing a copious, easy flow of urine, and a profuse perspiration, and will also promote the menstrual discharge. It is esteemed a valuable remedy for strangury, or difficulty of urine.

POLYGALA SENECA.

RATTLE OR SENECA SNAKE ROOT

THIS plant has upright, branched stalks, generally growing about a foot high; its leaves are somewhat oval and pointed; flowers white; root variously bent, and jointed, whence it received the name of rattle-snake root, because of the supposed resemblance of the root to that snake's tail.

Active medical properties have long been ascribed to this root; and different distinguished practitioners have prized it highly as possessing active remedial virtues, for different disorders.

According to Percival, Millman, and some others, it is diuretic, and has been employed with success in various forms of dropsy, and nephritic complaints generally. Professor Chapman recommends it very highly, as an emmenagogue, relieving obstructions of the menses;—the decoction of the root being taken in doses of a tablespoonful four times a day.

Dr. Tenant was rewarded by the legislature of Pennsylvania, for discovering and promulgating its virtues in curing the bite of a rattle snake. This act of the Legislature shows, that liberal minded and public spir-

ited men composed that body; but it has by no means conferred the virtue of a specific, for a snake bite, on this article.

Many distinguished medical men have borne testimony to the efficacy of the seneca snake root, for violent colds, croup, pleurisy, acute rheumatism, and inflammatory complaints, being an admirable medicine to promote perspiration. The mode of using it is in decoction; of this you may give a wine-glassful every three hours to adults, increasing or lessening the quantity according to the constitution, so as to avoid puking or purging.

WATER CRESSES.

This plant grows in running brooks, and in wet ditches. This article is said to be diuretic; but its chief celebrity is derived from its efficacy in curing the scurvy. For this purpose, either the green herb may be used as a vegetable diet, or the expressed juice may be administered in doses of a table-spoonful three times a day; this has often proved an effectual remedy.

NICOTIANA TABACUM.

TOBACCO.

Do not be alarmed reader, it is not my intention to advise you either to chew, smoke, or snuff the weed; and although many good men indulge themselves in the use of this "obnoxious luxury," the fact adds nothing to their credit, nor can their example justify a practice, against which, decency, economy and reason, furnish so many weighty objections. Nor is it my intention to recommend it as an article that ought frequently to be resorted to for medical purposes; although it possesses at

least eight grand, medicinal properties; it is diuretic, sudorific, cathartic, emetic, antispasmodic, anthelmintic, expectorant, and errhine. All these properties it possesses in a most powerful degree; yet its narcotic effects on the system, render it a dangerous medicine to tamper with; and in fact, it has some effects directly at war with animal life, and consequently is not a medicine that this book would recommend. A reflection that the knowledge of its medical virtues, might be of service to the reader, in some extreme cases, where the remedies herein recommended, could not readily be had, or might not be at hand, was the leading motive that secured this article a place in this work.

DIURETIC.—Perhaps no article in the compass of medicine, will more readily dislodge the dropsical fluid from the system than this. A remarkable cure of dropsy was performed by DR. CUTBUSH, sen. physician of the American Marine hospital at Syracuse. The subject of this cure was a young woman, who had previously consulted *thirty-three* of the best physicians Italy afforded, to no other purpose than to be convinced, that they could not cure her. He directed the application of a tobacco leaf steeped in vinegar, to be made to the abdomen, which produced sickness at the stomach, puking, vertigo, and great depression of the muscular strength. As soon as these symptoms appeared he removed the tobacco. This application, he continued for several days, twice a day, removing the tobacco, as soon as the above symptoms occurred; and in twenty days his patient was completely cured.

SUDORIFIC and EXPECTORANT.—It is never employed specially for these purposes, though, it always produces these effects, when employed for other purposes.

ANTISPASMODIC.—In cramps, spasms, colic or locked-jaw, it generally gives relief, though it prostrates the muscular strength. The most obstinate colics have been relieved, by giving a table-spoonful of the infusion in a half pint of gruel, in an injection, repeating, or grad-

ually increasing the infusion, as the case may require, until relief is obtained, or vomiting produced.

ANTHELMINTIC.—Tobacco leaves applied over the stomach have often removed worms when other remedies failed; but be careful to remove the leaf as soon as sickness at the stomach is produced, and when the patient recovers from the nausea, if the worms be not expelled—repeat the application. This treatment has even expelled the tape worm. An instance of which, the reader shall have.

A few years since J. T. Esqr. of this county was for some time in a low state of health, and, if we have been correctly informed, during this time, he went to the gold mines in Georgia; and while there one day, he was suddenly taken very bad, and appeared to be dying. One of his acquaintances, who happened to be at no great distance, hearing of the circumstance, and conjecturing the cause, ran with all haste to him, and applied some tobacco to his stomach; and as he appeared to be choking, he also put some in his mouth, that the amber being swallowed might hasten the operation of the poultice on the stomach. In a short time, a tape worm upwards of thirty feet long was expelled; and the gentleman is still living, and enjoys health.

EMETIC.—This article may be employed as an emetic, by an application of the leaves over the stomach, in cases where laudanum has been swallowed for the purpose of destroying life. In such cases the laudanum prevents the operation of an emetic given internally.

CATHARTIC.—This article administered in injections, as directed above, will relieve the most obstinate costiveness, producing an immediate evacuation of the contents of the bowels.

CLASS, NO. VII. EXPECTORANTS.

EXPECTORANTS are a class of medicines, employed to disengage mucus or any other irritating matter, and promote its ejection from the throat and lungs. Botanical *materia medica*, is not destitute of several valuable articles of this class. It would be proper to administer expectorants, when the mucus has become too thin and acrid, or when it is too viscid, or when the excretaries are not sufficiently active to throw off their contents.

GLYCYRRHIZA GLABRA.

LIQUORICE, SWEET LIQUORICE.

THE Liquorice is a perennial plant, and is a native both of Europe and America. The root, which is the part used for medicinal purposes, has a sweet, agreeable taste. The sweetness is extracted from the root by steeping it in water, which, by evaporation, forms the dark colored extract commonly known by the name of liquorice ball; this extract possesses the virtue of the root.

Both the root, and extract are considered as useful in coughs, hoarseness, and asthma, generally affording some relief by lubricating the throat, and loosening the tough phlegm. Both the activity, and usefulness of this article, may be increased by combining it with other active expectorants.

INULA HELENIUM.

ELECAMPANE.

THE elecampane grows in stony pastures, about houses, and along road-sides; leaves are large; flowers large and yellow, appearing in July and August.

The root, when dry has an agreeable, aromatic smell; and has long been celebrated as a valuable expectorant in disorders of the lungs, as coughs asthmas, and consumption. It likewise promotes an increased flow of urine, and insensible perspiration, gently opening the bowels; and to this it may be added that it possesses the property of a strengthening, restorative medicine.

The pulverised root combined with honey, is the best mode of using it as an expectorant, or it may be used in sirup. The sirup is recommended as being good for pregnant women of weakly habits. Some practitioners give this article the credit of being useful among children in worm complaints. An ointment made of the fresh root, is said to be good for the itch.

MARRUBIUM VULGARIA.

WHITE HOARHOUND.

THIS is a well known, perennial plant, growing near houses, along lanes, and amongst rubbish. The leaves are remarkably bitter, leaving in the mouth, a pungent, unpleasant impression. The decoction is said to be good for poisons, to check and cure salivation, and to remove obstructions. A sirup, made by simmering a pint of honey in a quart of the decoction over a slow fire, one hour, is valuable for colds, coughs, hoarseness, and breast-complaints.

SANGUINARIA CANADENSIS.

RED PUCCOON, RED ROOT, BLOOD ROOT.

RED PUCCOON has a horizontal, fleshy root, reddish outside, sending out a few fibers, and when broken, emits a bright red juice. Puccoon is a native of North America, and of no other region on the globe, as far as has yet been learned. It abounds in almost all the states, growing mostly in rich woodlands and on hill sides. The stalks are naked, bearing on the top, one heart-shaped leaf, of a pale light green, streaked with veins of an orange color, and one single, white flower.

The root of this plant, is the part used for medicinal purposes, and according to the testimony of many distinguished physicians is a most active and valuable medicine. A decoction of the root taken in small doses, acts as an expectorant, and is highly esteemed for coughs, and inflammation of the lungs. By some, it is considered a most powerful remedy for the croup. For this complaint, the decoction is given in table-spoonful doses, until it produces puking. Let it be remembered that it is a very powerful medicine, and that it will not require much to do this; and taken too freely, it will produce some very unfavorable symptoms.

The tincture is said to be good, in colds, pleurisies, rheumatisms, and other inflammatory disorders. The tincture is also good for jaundice, torpor of the liver, attended with colic, and for suppressed menses. The powdered root, snuffed up the nose, is said to be a certain cure for *polypus*; and sprinkled on ill-conditioned ulcers, it seldom fails to produce a happy effect. The root infused in vinegar, is excellent for tetter or ring-worm. The juice of the root is discutient, and seldom fails to remove warts.

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HYSSOPUS.

HYSSOP.

HYSSOP is a well known garden herb. An infusion sweetened with honey, or a sirup made of the expressed juice, is a most pleasant and valuable expectorant in colds, coughs, humoral asthma; and other disorders of the breast, and lungs, accompanied with inflammatory symptoms. Women have found the infusion an excellent, simple article to bring on the regular flow of the menses. This is also a pleasant sweating medicine; and to relieve the headache, jaw or tooth-ache, when produced by cold settling in these parts, this article, to my personal knowledge, possesses great efficacy. The method of employing it, is;—take a strong infusion of the leaves and tops, drink freely, and then stove the head and jaws with the same. I have never known this to fail giving immediate relief. The same treatment often reduces painful swellings about the throat and glands especially when produced by cold. To stove means to cover the head with a blanket, and put a vessel of warm tea under it, occasionally throwing in a warm stone to keep up the heat until the head and jaws are in a profuse perspiration, which generally relieves them. Be careful then not to catch cold; and in this simple, safe method the most effectual relief is obtained.

ALLIUM CEPA.

ONIONS.

THE onion is commonly cultivated in the gardens of this country, as an esculent root. It has a strong, disagreeable smell, which it imparts to the breath of those who eat it; but this may easily be obviated, by eating a few leaves of parsley, immediately after eating onions.

Onions have lately acquired considerable celebrity

for their medicinal virtues, both as an expectorant and diuretic. And some remarkable cures of croup, sore throat, liver complaints, dropsy and gravel, have been affected by this article, which has secured it the reputation of being an efficient remedy for these complaints, both in Europe, and America. Repeated personal observation, has convinced me of the efficacy of the juice of the roasted onion, in promoting the discharge of the phlegm, and mucus from the pipe, in the early stages of violent attacks of the croup:—the mashed onion stewed in lard, applied to the throat, increases the good effect of the juice, and facilitates the cure.

For the satisfaction of the reader, we subjoin the following examples of cures performed by this article.

One of the children of the Hon. W^m. H. Crawford of Georgia, was violently attacked with the croup; and the disease became so alarming as to threaten the immediate death of the child, before the physician could arrive, if relief could not speedily be given. He instantly had some onions beaten, to which he added some lard; and with this mixture, the neck, breast, and back of the child, were well rubbed, which gave entire relief to all the distressing symptoms, in one hour; and by the time the doctor arrived the child had no need of him, being quite well.

Mr. Crawford, sometime after this, being on his way to Washington city, recommended the same treatment to a gentleman at whose house he had put up to stay all night, his infant daughter being apparently at the point of death from the same disorder. The remedy was tried with the same happy effect, to the great joy of the parents.

When Mr. Crawford was minister to France, he was afflicted with the sore throat, of such stubborn character, that the usual remedies failed to give him any relief; and he appeared to be threatened with immediate death, in the emporium of France, amidst the most skilful physicians, that refined country possessed. He again had recourse to onions, and in one night's time obtained per-

feet relief. The best mode of treatment, is to bathe the throat with the ointment, and apply the bruised onions to the soles of the feet.

He communicated the cure wrought on himself to a French lady afflicted with the same painful disorder. She pursued the same treatment, which was crowned with similar success.

Capt. B. Burch, of the district of Columbia, was afflicted with a liver complaint; and after he was given over by his physicians, as the victim of an incurable disease, he seeing some onions one day in the room, desired to eat one. His distressed wife, thinking his case incurable, and that it was no longer a matter of consequence what he eat, determined to gratify his appetite. After eating one or two, and finding that he was better instead of being worse, he determined to indulge his appetite still further; and accordingly he made them the principal part of his diet, using only, in addition a little salt and bread, for several weeks, and to his great satisfaction, he was restored to perfect health; and is still a living witness of the efficacy of this mode of treating a liver complaint. Many instances of the remedial virtues of the onion might be adduced; but one more must suffice, as an exemplification of its virtue as a diuretic.

A Baptist preacher, in the state of Virginia, was brought to the verge of the grave by the gravel, being pronounced incurable by his physicians. A slave belonging to one of his neighbors, directed him to drink, twice a day, morning and evening, a gill of red onion juice, and a half hour after, a pint of horse-mint tea. In a short time the good old parson was perfectly cured by this simple mode of treatment; and in gratitude to his physician, he bought the slave and set him FREE.

This same treatment, it is said, will cure the dropsy.

SNUFF OR SNEEZE-WEED.

THIS is a large weed, growing in rich grounds, and about barn-yards; it generally grows three or four feet high, much branched. The leaves have a bitter nauseous taste, and on being rubbed, have a pungent, aromatic smell.

The leaves dried and finely powdered, are a most powerful sternutory, or article to produce sneezing. On this account, it has been found valuable to open the head when stopped up with cold, it is also good for paralytic affections in the head, and for hydrocephalus or collection of water in the brain. Snuffing this article, often gives relief to the head ache, when it proceeds from cold, or from a collection of humors in the head.

LICHEN, OR LUNG-WORT.

THIS is a thin shell or skin, which grows on the bark of the white oak tree, thought to bear some fancied resemblance to the lungs, from which it has received the name of Lung-wort.

It is considered as being possessed of the same properties, that the Iceland moss or lichen possesses, which has acquired great celebrity for its efficacy in curing the consumption.

A strong decoction of this article, formed into a sirup with honey, taken in doses of a wine-glassful four times a day, is said to be a most valuable medicine for the hooping cough; and by some is highly recommended in consumption.

ASPLENIUM TRICHOMANES.

MAIDEN HAIR, SPLEENWORT.

This is the weed you sometimes see growing on old walis, rocks, and in stony, shady places, generally to the height of seven or eight inches, with fine, soft leaves, flowering from May to October. Its leaves have a sweetish, mucilaginous taste, without any particular odor.

An infusion of this plant, made by pouring a quart of boiling water on a handful of the dry herb, sweetened with honey, and taken in portions of a tea-cupful every hour, is most excellent for tickling coughs, hoarseness, and disorders of the breast; also for acrid humors, irregularities of the menses, and obstructions of the viscera.

SLAUGHTER LIMONIUM.

LAVENDER THRIFT.

This plant grows on the sea shore, and in salt marshes. It has a naked, branched stem, rising about a foot high; its leaves are long and pointed; flowers blue, and growing on long spikes on the tops of the branches, blooming from July to September.

According to the testimony of Dr. Hughes and Dr. Bates, a decoction of the root, administered in small doses, it is a valuable expectorant, good in most cases where articles of this class are useful; in larger doses, it is an active emetic. It is also esteemed as a valuable antiseptic, and has been employed with great success in curing the ulcerous sore throat; and in aphous state of fever, that is when fever produces an internal ulceration or canker, similar to the thrush.

POLYGALA VULGARIS.**MILK-WORT.**

COMMONLY found growing in dry pasture grounds; and flowers in June and July. The roots of this plant possesses an extremely bitter taste.

A decoction of this plant, made by boiling two handful of the root, in three pints of water down to a quart, and drank in doses of a gill every two hours, is a valuable expectorant, loosing the phlegm, and promoting its discharge; it is also diaphoretic, bringing on a free perspiration. This article has been employed with great success in colds, pleurisies, and disorders of the breast.

MOUNTAIN TEA, DEERBERRY.

THIS plant is found mostly in the more barren, mountainous parts of the United States, where it generally grows in great abundance.

A strong infusion of this plant, made by steeping a handful of the leaves and top in a quart of boiling water, and drank in doses of a tea-cupful, four times a day, is both expectorant, and diaphoretic; and has been recommended as highly beneficial in colds, pleurisies, coughs, and asthma. It is likewise valuable in promoting the regular menstrual discharge.

ASCLEPIAS ERECTUS.**WIND-ROOT, PLEURISY ROOT.**

THIS plant is thought to be a species of the *Asclepias Decumbens*, [pleurisy root,] which the reader will find in another class.

The wind-root generally grows in rich, high lands. The root has the appearance of a small, long sweet potatoe, with a similar taste; the stalk is erect; the leaves resemble the persimmon leaf; and when broken, emit a viscid, milky juice; flowers are of a cream color, with purple centers; blooming in May and June.

An infusion of the root is an admirable expectorant, and diaphoretic, drank in portions of a tea-cupful every two hours. This article is esteemed a most valuable remedy for pleurisy, and flatulent colic.

CLASS, NO. VIII.

STIMULANTS.

STIMULANTS are a class of medicines, which are employed to excite a new and stronger action in the system, or in some part of it, in order to overcome an existing one, which is morbid, or too languid; or to excite the operation of an obstructed one. Stimulants are generally distinguished into *local* and *diffusible*; the latter produce a universal excitement throughout the system, in a short time after exhibition; yet their effect is generally transient:—local, are those which are employed to excite action in some particular organ or organs. Those which produce permanent, and enduring effects are called *tonics*.

AMOMUM ZINGIBER.

GINGER, RACE, WHITE, BLACK GINGER.

THE article known in this country by this name, is the root of a perennial shrub, which is a native production of the East Indies; but is now cultivated extensively in the West Indies. Race is a term applied to the root to distinguish it from that which is ground or pulverized. The white ginger denotes that which is washed and scraped before drying; and the black, denotes that which is washed merely, without having the external, dark bark scraped off the root.

Ginger is a warm, stimulating aromatic, and is a most valuable article in the practice of medicine, being combined advantageously with many other articles, and is an important part of the diaphoretic powders.

For medicinal purposes you will do well to purchase the sound root, as that which is brought on in the pulverized state, is often prepared from unsaleable, worm-eaten roots, and is besides, frequently adulterated with other articles.

Dose, from half to a whole tea-spoonful, of the powdered root, in warm water sweetened. Externally it is very valuable in stimulating poultices.

ARUM TRIPHYLLUM.

INDIAN TURNIP, WILD TURNIP, WAKE ROBIN.

THE Indian Turnip is found in most states in the Union, growing mostly in shady, rich soil, but it is sometimes found in open poor soil. It has a perennial root, which in its shape, bears a great resemblance to the common turnip, though it is smaller; externally it is dark and wrinkled; internally it is white. Stalk grows six or eight inches high, of a purple color, bearing three leaves, and one flower of the same color of the leaves, succeeded by a roundish cluster of red berries.

In its fresh or green state, the Indian turnip has a powerfully acrid, biting taste; and is stimulant, carminative, expectorant and diaphoretic. When dry it loses much of its intolerable pungency, together with much of its virtue.

A conserve made by grating the green root, and combining it with three times its quantity of honey, or loaf sugar, and taken in doses of a tea-spoonful three times a day, is reputed as valuable for coughs, particularly, for hooping cough. In the dry state, this article may be profitably combined with other articles in forming expectorant compounds.

Professor Barton relates an instance, in which a decoction of the root made of new milk, drank three or four times a day, effectually cured the consumption.

An ointment made by simmering the fresh root in hog's lard, and one eighth part of wax is said to be a valuable application for scald head, and scrofulous sores.

ASARUM CANADENSIS.

WILD GINGER, COLTS-FOOT, HEART SNAKE-ROOT.

WILD GINGER is found in most states, but most abundant in the South, growing generally in rich, shady wood-lands, often in a moist soil; Its root runs horizontally in the ground, is perennial, round, fleshy, jointed, having many fibers, and of a brown color outside. Its leaves are radical, round, hairy, supported on long foot-stalks, veined, two from a root, and in shape, somewhat resembling a colt's foot. Flowers, only one to a root, growing out so close to the ground between the foot-stalks, as to be scarcely perceptible.

The root of this plant is a warming stimulant; useful to promote perspiration, and diffuse a stimulus, throughout the system; and on this account is valuable for colds, coughs, and female obstructions. It may be used in decoction, tincture, or sirup, taken in small doses oft repeated; for if taken in large doses, it operates as an emetic. Some distinguished physicians, say that a free use of the decoction, is an excellent article in nervous fevers, and jail cramps.

A snuff made of the dried leaves, finely pulverized, and snuffed, is very valuable in diseases of the head and eyes.

ASCLEPIAS TUBEROSA.

PLEURISY ROOT, BUTTERFLY WEED,
FLUX ROOT, &c.

PLEURISY ROOT is a beautiful plant, abounding in most parts of the United States; but it is most abundant in the South, flourishing best in sandy or gravelly soil, along fences, and in old uncultivated fields. It has a large, white, crooked, branching, perennial root; stems woolly or hairy, branched, several from the same root, sometimes erect, though mostly decumbent, hence its technical name is sometimes, "*Asclepias Decumbens*"; its leaves are promiscuous, very hairy, pale on the under side, thick or fleshy, and of an oblong shape. Its flowers grow in terminal, corymbose umbels, and are of a most beautiful, brilliant, orange color, easily distinguished from all the flowers, that adorn the fields; they appear in July and August.

Few articles in *materia medica*, are of more general utility than the pleurisy root, as it may be profitably combined with almost any other article, and is seldom administered without exerting a salutary effect. For difficulty of breathing, or shortness of breath, and in most disorders of the lungs it is most excellent. By some it is regarded as almost a specific for the pleurisy, hence its name pleurisy root; but whether it be a specific or not for this complaint, it is without doubt, a most excellent remedy for that most painful, and often fatal disorder.

It also acts as a mild purge, and is peculiarly applicable in the treatment of bowel complaints among children. Its use in a strong decoction, often gives immediate relief to pain in the breast, stomach, and intestines, promoting perspiration, and assisting digestion. The root may be used either in decoction, or powder; of the pulverised root, a tea-spoonful or more may be used at a dose, repeated as often as circumstances may require. If you wish to promote copious perspiration

without raising the internal heat, perhaps no article in *materia medica* is better adapted to your purpose.

From its value as a carminative or medicine to remove flatulent colic, it is sometimes called wind-root.

CAPSICUM ANNUUM.

CAYENNE PEPPER, RED PEPPER.

CAYENNE is a native of tropical climates, but is now cultivated in both temperate and tropical climes. Of this article there are several species, not necessary to be distinguished; that growing in Africa is considered the best of all, and is generally called the African Cayenne.

Without doubt cayenne is one of the most pure, and powerful stimulants in the compass of medicine. According to the best accounts, Makatrick, an English or Scotch physician, was the first who used this article for medicinal purposes. It has since become a very important article in the botanical practice; and its medical properties have been more fully developed by Dr. Thomson. It is very extensively employed both externally and internally, forming a part of many of the most valuable compounds.

Cayenne is one of the most permanent, unfailing stimulants, operating upon the living machine in a most active manner, in perfect harmony with the laws of animal life. Externally applied, cayenne is a valuable article for what is termed passive inflammations and indolent ulcers. Among the compounds, the reader will learn more particularly, its extensive, and varied uses.

S*

CROCUS SATIVUS.

SAFFRON.

SAFFRON is cultivated in the gardens both in Europe and America. It has a pleasant, pungent smell, and a fine, aromatic, bitter taste; and when chewed, it imparts a deep yellow color to the spittle, or saliva.

An infusion of this article is reputed a good remedy for various complaints among children, such as redgum, jaundice, and all eruptive diseases, in general. Combined with nervines and tonics, it is very useful in hysterical and hypochondriacal affections.

Exhibited in small doses, saffron exhilarates the spirits, producing a most lively flow of animated feeling; but if taken too freely, it produces immoderate mirth, with many other effects similar to those resulting from the inordinate use of ardent spirits.

LAURUS CAMPHORA.

CAMPHOR TREE.

THE article known in this country as gum camphor, is the product of the camphor or camphire tree, which is a native of Japan, and grows in great abundance, and to a considerable size in the forests of that country.

The roots, trunk, and branches, all contain the gum, which exists in distinct grains through the wood, and is separated from it by a process called sublimation, which is something similar to distillation. It may be remarked however, that camphor is a proximate principle of vegetable matter, and exists in greater or less quantities, in all aromatic plants.

The tincture of camphor is a very common family medicine, useful as a stimulant in sickness and fainting, &c. and as an anodyne, in head-ache, colic, &c.

Applied externally in the form of a linament, it is use-

ful to reduce swellings, and to relieve pains, bruises, sprains, &c. This article forms an ingredient in opodel-doc.

LAURUS CINAMOMUM.

CINNAMON TREE.

THE cinnamon tree is a native of the isle of Ceylon, in the East Indies; but it is now cultivated in many of the West India islands. This tree, or rather bush, grows about ten feet high, and is very bushy. Its leaves resemble the laurel, and, when chewed, have the hot taste, and aromatic smell of cloves. Cinnamon of the shops, is the inner bark of this tree.

The bark is a useful and pleasant aromatic, very grateful to the taste, and strengthening to the stomach. It is stimulant, stomachic, carminative and tonic; and is valuable combined with bitters, and diaphoretic powders, &c. The oil is a very powerful stimulant; and it is said, that a little of it put in a hollow tooth will give relief to the tooth-ache.

LIATRIS SPICATA.

COLIC ROOT, BUTTON SNAKE-ROOT, BACK-ACHE ROOT.

THIS plant has a rough, perennial, fibrous root, and on the fibers grow little button-like knobs. Its stem is round, and sometimes branched, supporting on its top a spike or tassel of scaly purple flowers, bearing a slight resemblance to the shape of an acorn. Found in most of the Western States, but in the prairies it is very abundant.

This root possesses some valuable medicinal qualities; it is a warming stimulant, a diuretic, sudorific, carminative, and anodyne. A decoction of the root, or a tincture of it, is a valuable remedy in most cases of the col-

ic; it is also good for the back-ache, and pains in the limbs, and for dropsy. It may be advantageously combined with other articles, of the stimulants, tonics or dia-phoretics.

MYRTUS PIMENTA.

ALLSPICE TREE, PIMENTO TREE.

THIS tree is the spontaneous product of Jamaica, one of the West India isles. Allspice is the fruit plucked from the tree before it is ripe, and is dried in the sun. The proper name of this fruit is pimento, or Jamaica pepper; but its scent resembling that of a mixture of cinnamon, nutmeg, and cloves, it has received the name of *Allspice*. It is a warm, aromatic stimulant; and is useful where gentle, stimulant stomachics are needed; valuable in compounds.

PIMPINELLA ANISUM.

ANISE.

ANISE is a perennial plant, a native of the isle of Crete, Syra, and some other parts of the Eastern World. The seeds of this plant are the part used for medicinal purposes; and they have a pleasant, aromatic odor, with a warm, sweetish taste. In the seeds resides a considerable quantity of oil, which is separated by distillation, and is known in the shops by the name of oil of anise.

This article is a pleasant stimulant and stomachic; and is useful to expel wind from the stomach and bowels. The oil or essence, enters into many of the compound tinctures, either as a medicinal agent, or a corrector of the bad taste of other articles.

PIPER NIGRUM.

BLACK PEPPER.

The article known in this country by the name of black pepper, is the fruit of a tree, which grows spontaneously in the East Indies, that nursery of spices. The berries are gathered and dried before they are ripe, and to this circumstance, are they indebted for their black color.

Black pepper is stimulant, and slightly astringent. It is much used as a condiment in cookery. It may be employed as a substitute for cayenne, or red pepper, where they cannot be had, as it possesses similar medicinal properties, though in an inferior degree.

POOL-ROOT, WHITE SNAKE-ROOT.

This plant is found in the Western States in great abundance; but is principally confined to dry or upland soils, and in lands timbered with oak and hickory, it flourishes most plentifully.

It has a small, fibrous, dirty white colored root, growing from two to four inches long. Its stem rises from two to three feet high, angular and furrowed. Leaves opposite, alternate, supported on long foot-stalks, broad at the base, acute at the point, edges obtusely dentate or toothed. Branches axillary to the leaves, bearing bracts, more extended towards the top; and on these grow out the flowers in beautiful clusters of white.

The root, which is the part used for medicinal purposes, has a warm, aromatic pungent taste; and is stimulant, tonic and diuretic. This root either in decoction or tincture, is in great repute among the Indians for the fever and ague. As a diuretic, it has some reputation for gravelly complaints. Its medical properties are not extensively known; but from the active virtues it exhibits, they are worth the more careful attention of physicians.

DAPHNE MEZEREUM.

DWARF-BAY, MEZEREON.

DWARF-BAY is found growing mostly in woody, shady places; and is very abundant near the Ohio: and what is quite uncommon, this singular plant blooms in the cold months of February and March. Its flowers are of a beautiful red or rose color; the leaves are spear-shaped.

The bark of the root, which is the part used in medicine, has an extremely acrid, burning taste; and is highly stimulant and diaphoretic.

This article is so acrid and irritating that it can not be used constantly; but it may be used in small portions, and at intervals, regulating the time and quantity by its effects. Dr. Withering states that an individual of his acquaintance, who had labored under an extreme difficulty of swallowing for three years, was effectually relieved by chewing this root at intervals, as he could bear its irritating effects, for two months.

This root has some reputation for its efficacy in curing rheumatism, and obstinate cutaneous diseases. Its chief celebrity, however, is for the venereal, giving relief in the last stages of that loathsome disease, when mercury the *alpha* and *omega* of the faculty, has, in a great measure, ruined the constitution, this article is then found most effectual in relieving nocturnal pains, and removing what is called venereal nodes.

The proper method of employing the mezereon, is to take equal quantities of this bark, and of the liquorice root, and of this compound, make a decoction by boiling it in water.

VISCUM.

MISTLETOE.

MISTLETOE, which is sometimes called misseldine, grows on several kinds of trees. That which grows on the oak, has acquired considerable celebrity for its efficacy in the cure of epilepsy or fits. Let the mistletoe be gathered about the last of November, and gradually dried, then let it be pulverized, and preserved in well corked bottles. Dose, a tea-spoonful, three or four times a day, gradually increasing the quantity, if necessary, which must be determined and regulated according to the effects.

ANDROMEDA MARIANA.

MOOR-WORT.

MOOR-WORT grows plentifully in many parts of the South. A strong decoction of this plant, is highly esteemed as a stimulating wash, and is very useful for that disagreeable ulceration of the feet called toe-itch, and ground itch, a complaint very common among the blacks, in some of the Southern States.

LEONURUS CARDIACA.

MOTHER-WORT.

THIS plant grows in waste places, and flowers in July and August. The flowers are white on the outside, and purplish within, growing in thorny whorls. Leaves are opposite, two to each whorl; and have a strong disagreeable odor, and bitter taste.

An infusion of this plant is a stimulant, reviving, cordial bitter, much used in fainting, and in disorders of

the stomach. It is recommended by some creditable physicians, as being peculiarly adapted to some constitutions affected with nervous and hysterical agitations; and if taken at bed time, it procures a quiet, refreshing sleep, when opium and laudanum have failed; and it is not attended with any of those deleterious consequences that result from the use of those pernicious articles.

CARAWAY.

CARAWAY is cultivated in our gardens, as a choice aromatic; and is often used as a condiment in cookery. The seeds are a pleasant, aromatic, stimulant, and tonic; and are valuable to assist digestion, strengthening the stomach; and are likewise carminative, expelling wind from the stomach, and relieving flatulent colics. Dose, from one to two tea-spoonfuls of the powdered seeds, for adults.

SALVIA.

SAGE.

AMONG some of the ancients, sage had obtained the reputation of being the *elixir of life!* The prevalence of this opinion, was the foundation of the following motto: "Cur moriatur homo, cui salvia crescit in horto?" How can a man die, in whose garden grows the sage? This is proof of the estimate the ancients placed upon it; but is by no means a correct estimate of its medicinal properties, as it can not be considered as being possessed of any very active medical virtues. An infusion or tea of the leaves, sweetened with honey, is serviceable in colds, coughs, nervous, debility, and for persons of phlegmatic habits, and also for weakly females.

The late sir John Hill of England, made a patent tinc-

ture of sage, to which, he rediculously enough ascribed the virtue of retarding the advance of old age, grey hairs and wrinkles, prolonging the period of existence, and sustaining the vigor of the constitution. The imposition took with the nation, and he made a fortune; but such a cheat could not fail to bring down upon him and his tincture, the witticisms of the more discerning; and accordingly, Garrick, and Thomson, conjointly, published the following epigram:—

“Thou essence of dock, valerian, and sage,
At once the disgrace, and pest of the age,
The worst we wish thee, for all thy bad crimes,
Is to take thy own physic, and read thy own rhymes.”

To which, Dr. Hill made the following reply:—

“Ye desperate junto, ye great or ye small,
Who combat dukes, doctors, the deuce, and them all,
Whether gentlemen, scribblers, or poets in jail,
Your impertinent curses shall never prevail:
I'll take neither sage, dock, nor balsam of honey;
Do you take the physic, and I'll take the money.

ALLIUM SATIVUM.

GARLIC.

Garlic is stimulant, carminative, diuretic, and anti-scorbutic. As a stimulant it is both powerful, and diffusible; and on this account it is very useful for persons of cold, phlegmatic habits. The sirup increases the appetite, assists digestion, removes flatulence, and has long been esteemed as useful for scurvy, asthma, and dropsy.

Garlic applied to the soles of the feet, says Dr. Sydenham, exceeds any other application to produce a revulsion from the head; and on this account, the garlic poultice to the feet, and the sirup taken internally, is a

most excellent remedy for collection of humors in the brain. For croup, or sore throat, apply the garlic poultice to the feet, and anoint the breast and throat with the oil, made by bruising the garlic and adding some lard, and warming the compound enough to melt the lard; this treatment of the croup and sore throat is usually attended with great success.

An application of the garlic poultice to the pubes, is useful to promote the discharge of the urine, when its retention has arisen from the want of due action in the bladder. Either the ointment or the poultice is good to disperse cold, indolent tumors. Cotton or wool wet with the juice of garlic, and put in the ear, and renewed three or four times a day, has often proved efficacious in removing deafness.

In making the garlic poultice, you must mix equal parts of bruised garlic, and crumbs of bread moistened with strong vinegar; for the garlic alone, will draw a blister. This poultice applied to the feet in the low stage of acute disorders, and nervous fever, is good to raise the pulse, relieve the head, and increase a general organic action. Persons afflicted with hysterical and hypochondriacal affections would find it beneficial to use a tincture of garlic.

SEVEN-BARK.

SEVEN-BARK is a shrub growing mostly in the Southern States, in low, wet, thin soils, generally about eight or ten feet high. It is covered with several coats of thin bark, of a brownish yellow color, which always have the appearance of peeling or scaling off: its leaves are large, and rough:—flowers are large, of a beautiful white, appearing in June and July.

The leaves, and bark, have a very acrid, pungent taste, not very dissimilar to that of the prickley ash. This article is stimulant and antiseptic; its chief celeb-

rity however, so far as its virtues are known, is derived from its efficacy in healing indolent ulcers, reducing tumors and swellings, and relieving sprains, bruises, and the like. For this purpose the inner bark and leaves are bruised and applied in form of a poultice.

PYRUS CYDONIA.

QUINCE TREE.

Both the expressed juice of the ripe quince, and the sirup, are employed with great success to increase the tone of the stomach, relieve it of nausea, and to check vomiting. The seeds of the quince make a fine mucilage, to which add a little sugar and nutmeg, and the compound is a most excellent drink in the dysentery, or bowel complaints of children. The ripe quince steeped in spirits sweetened with sugar, or equal parts of juice of the ripe fruit and French brandy or proof spirits, sweetened with sugar, forms a most admirable cordial and stomachic.

Preserves of an excellent quality are made of the ripe quince. A very pleasant domestic wine is made of the quince, by taking the cider or expressed juice of the quince, and adding two pounds of sugar to each gallon of the juice.

ACORUS CALIMUS.

CALIMUS, SWEET FLAG.

CALIMUS grows mostly in low marshy places, and in shallow water. It has long, sword-shaped leaves, resembling those of the flag, but they are narrower, and of a brighter green. Its root has a strong aromatic smell, and a warm pungent taste. The flavor is improved by drying the root. Calimus possesses stimulant and stomachic virtues; grated into water and given to children, it frequently relieves them from flatulent colic.

IRIS PSEUDACORUS.

BLUE FLAG.

THE blue flag generally grows in low situations. Its leaves are of a deeper green than those of the yellow or water flag. It flowers in July; its flowers are blue.

The root of the blue flag is one of the most permanent stimulants in the compass of medicine; and is generally useful where articles of this class are needed. A tincture of this root has often been administered with great success as a remedy for rheumatism. When employed for this purpose, use it as freely as you can bear its intoxicating effects; and perseverance in its use, will generally be crowned with success.

Some practitioners recommend the pulverized root, given in doses of a tea-spoonful, as a good vermifuge, or medicine to expel worms. Dr. Ewell recommends the juice of the fresh root in doses of a tea-spoonful diluted with water as an active cathartic. Of this however, we have no knowledge having never tried it for that purpose.

The root of the yellow or water flag, mixed with the food of hogs that have been bitten by a mad dog, has been effectual in saving them, whilst others bitten at the same time, and not fed in the same way, have run mad.

CLASS, NO. IX.

TONICS.

TONICS are a class of medicines that increase the tone or strength of the organic system, and invigorate the living power. Nature's kind Author has very liberally furnished the Vegetable kingdom with active articles of this class. A class of medicines designed to give vigor to the muscles, improvement to the appetite, and tone of the digestive powers, must be of extensive utility; and we would remark that *Tonics* may be distinguished into two kinds, viz: *Astringent Tonics*, and *Bitter Tonics*: the former are peculiarly appropriate for the treatment of dysentery, diarrhea, &c: the latter, to invigorate the system generally.

ALETRIS ALBA.

STAR ROOT, UNICORN.

STAR ROOT grows in meadows, and on hill sides. It has a hard, rough, wrinkled, perennial root, of a dirty dark color, full of little holes, having many small, blackish fibers; the cuadex or main root, is about the thickness of the little finger;—the end often dead or rotten. Leaves radical, pale, ever-green, smooth, lanceolate or spear-shaped, and in the winter, they lie flat on the ground. The scape or flower stalk rises from eight to eighteen inches high, upright, naked, terminating in a spike or tassel of white flowers.

Star root is considered a most excellent tonic and general strengthener of the system. According to the testimony of Dr. Rogers, it is a valuable article in the

treatment of jaundice, rheumatism, strangury, and flatulent colic. Pregnant women liable to miscarry, find great advantage in the use of this root, as it is considered one of the best articles to prevent abortion. For suppressed menstruation, some reputable practitioners esteem this root as a valuable remedy.

Unicorn root is considered an important article for coughs, consumptions, and complaints of the lungs; because it not only strengthens the system, but also promotes expectoration and perspiration. Some patients, however, cannot make a constant use of this article, on the account of its making the mouth sore. When this is the case, the patient must use some other expectorant at intervals, and by this means he may avoid suffering anything from soreness of the mouth, and also enjoy the benefit of the active remedial virtues of the star root. Dose, half a tea-spoonful of the powdered root, two or three times a day:—large doses produce unpleasant symptoms.

ALNUS SERRULATA.

TAG ALDER, BLACK ALDER.

TAG ALDER is a perennial shrub; found mostly in low, wet soils, and along streams. It generally grows from six to twelve feet high, several in a cluster; leaves are large, rather obtuse, of a dark green color. This shrub bears tags or cones a little similar to those of witch-hazle, from which it derives the name of tag alder.

The tag alder is an excellent tonic; and is found to be a cheap, safe, and valuable article of family medicine. A decoction of either the bark, leaves, or tags, may be used; and if drank freely, is valuable for all eruptions or diseases of the skin, and particularly for boils. A free use of this decoction, is good for women troubled with bearing-down pains, either before or after child-birth, removing the canker, and relieving the pains.

Cloths kept wet with the decoction, and applied to

hot swellings afford much relief, and generally scatter them. Among the Indians a poultice made of the leaves, tags or inside bark, has the reputation of being an excellent remedy for strains, and swellings; relieving the former, and discussing or scattering the latter.

ANETHUM FENICULUM.

FENNEL, SWEET FENNEL.

FENNEL is a perennial plant, a spontaneous product of Italy, and the United States. It is too well known to need any description whatever. The seeds of the fennel are a pleasant aromatic tonic; and as such are useful in bitters, and in a variety of other compounds, either as a medical agent, or to improve the taste of other articles.

From the seeds, a fine, aromatic oil is obtained, by distillation, which, administered in doses of from three to twelve drops, is esteemed a good remedy, among children for flatulent colic. Where the oil can not be had, take the pulverized seeds, in doses of half to a whole tea-spoonful, with a little sugar and spirits added to it, which will nearly answer the same purpose: this also promotes the cutaneous transpiration, and increases the discharge of urine.

ANGUSTURA BARK.

ANGUSTURA BARK is an imported article, which has long had the reputation of being a valuable tonic, said to be in many respects superior to the Peruvian bark. The first importation of this bark was in the year 1788; from the island Dominico; and was by some distinguished naturalists, supposed to be the bark of some species of the magnolia. But as all importations of this article

was by, or through the Spaniards, it was conjectured that the tree from which this bark was obtained, was also a native of South America. The truth of this conjecture, has been confirmed by the late travels of the distinguished botanist Humboldt, in that country. He found the tree to be a new genus, belonging to the first order of the fifth class of Linne's system; and in his *PLANTÆ ÆQUINOCTIALES*, he has described it under the name of *Bonplandia Trifoliata*. This article derives its name Angastura, from the Spanish word Angostura, which is the vulgar name of the town of St. Thomas, near the Straits of Orinoco, at which place this bark forms a considerable article of commerce.

This bark varies in appearance, according as it has been taken from larger or smaller branches. The outer surface is wrinkled, and of a greyish color; the inner surface of a dark brown. The powdered bark is of a yellow color; its taste, intensely bitter, and slightly aromatic, leaving in the throat and sauces, a strong sensation of heat, and pungency.

As an aromatic bitter, this bark has been found both tonic and stimulant, giving tone to the digestive organs, increasing the appetite for food, removing flatulency and acidity arising from dyspepsia, and is reputed one of the best articles for diarrhea or dysentery, proceeding from weakness of the bowels; and does not oppress the stomach, as the Peruvian bark generally does. Dose, half a tea-spoonful of the powder; but the tincture is the best, as it yields its virtues to proof spirits better than any other menstruum.

ANTHEMIS COTULA.

DOG FENNEL, MAY WEED, WILD CHAMOMILE.

MAY WEED is a well known plant, abounding in every country; and is regarded as a species of chamomile.

This is a very valuable medicine. It is tonic, sudorific, diuretic, emetic and anodyne; and has been advantageously used in colds, fevers, rheumatism, hysterics, epilepsy, dropsy, and asthma. A decoction, or tea of this plant, taken in small doses, as warm as can be drank is a most active sudorific, promoting a copious perspiration. A flannel cloth wet in a strong decoction of this weed, and applied to the neck and breast of a child afflicted with croup, will greatly assist the operation of internal remedies, and immediately subdue the disorder. An external application of the bruised plant, will sometimes draw a blister, unless weakened by making a poultice of it with meal. In this form, or in fomentations the may weed is applied in the treatment of rheumatism, pains, bruises, and the like; the patient taking some suitable internal remedy at the same time. [See *rheumatist*.] Of the efficacy of this article in the treatment of inflammatory rheumatism, the writer has the best of testimony, having experienced personal relief, from that painful disorder, by the use of this article.

APOCYNUM ANDROSÆMIFOLIUM.

BITTER ROOT, WANDERING MILK-WEED, BITTER DOG'S-BANE, HONEY-BLOOM.

THIS root lives in the ground all winter, and is about the size of the little finger, branching and running horizontally under the surface of the earth in various directions, for some distance, of a dark red, and sometimes nearly black, and when broken, exudes a milky substance. From the root and its branches spring up several, smooth stalks, covered with a tough fibrous bark like the hemp, growing from two to four feet high, branching towards the top, the side exposed to the sun has a red appearance. Leaves are ovate, acute at the point, entire, and growing out opposite. Flowers white,

and bearing some resemblance to that of the buck-wheat; — flowers are succeeded by the pods containing the seeds, which are of a dark red color, growing in pairs, resembling the pod of a cabbage, though some larger, always hanging down, containing besides the seeds, a cotton-like substance.

The root of this plant is intensely bitter, and a powerful tonic; it is also cathartic and emetic if taken too freely. As a laxative, bitter tonic, this article is highly useful in the practice of the healing art. Some of the Southern tribes of Indians, it is said, consider this article a specific for the venereal disorder; and it is much used by them for that purpose, with great success. A decoction of this root is recommended as an excellent wash for the scald head, and for ulcers. Dr. Thomson reputes this article as one of the best correctors of the bile, and regulator of the biliary system, with which his extensive experience had made him acquainted. A free use of the tea of this root, so as not to produce violent vomiting, at the forming stage of a fever generally breaks it, and throws it off entirely.

ARALIA RACEMOSA.

SPIKENARD, WILD LIQUORICE.

OF the spikenard there appear to be two classes, and distinguished, by their botanic or technical names, as *Aralia Racemosa*, and *Nardus Indica*. They, however, may be used indiscriminately. Spikenard has a perennial root of a brownish yellow color, dividing from the caudex or head in to several branches or distinct roots, about the size of a small finger. Sometimes but one stem, and sometimes more than one rising from the same root, from two to three feet high, of a reddish brown, branched towards the top. Leaves are biennial, consisting of nine folioles or small leaves. Flowers of a yel-

lowish white, growing in umbels. Berries are small, and bear some resemblance to the elder berry.

Both roots and berries are used medicinally; and may be employed either in tea or sirup: it is tonic, astringent, diaphoretic, antiseptic, and expectorant. This article is useful for coughs, phthisics, female weakness, and diseases of the lungs. For this last complaint, Dr. Shelton, a reputable physician, ranks the spikenard sirup as one of the best remedies, with which his experience for ten or twelve years, extensive practice, had made him acquainted. He makes the sirup by boiling the roots until all the virtue is obtained from them, then strain the decoction, put it over a slow fire, and reduce it to the consistence of a thin sirup, sweeten it with honey, and set it by until it ferments. Of this sirup he directs the patient to take three tea-cupsful a day. A poultice made of the roots, or a plaster made of the sirup before the honey is added, is esteemed as useful for wounds and ulcers.

ARISTOLOCIA SERPENTARIA.

VIRGINIA SNAKE-ROOT, SNAKE-WEED, SNAGREL.

VIRGINIA SNAKE-ROOT, grows very abundant in the Alleghany and Cumberland mountains; but is also found in most states in the Union, delighting mostly in shady places.

This plant has a small, light, bushy root, consisting of a number of fibers matted together, issuing from one common head; it is brown outside, and yellowish within, turning darker on drying. It has a round, slender, crooked and jointed stem, growing from six to ten inches high, bearing from three to seven leaves, which are long, and heart-shaped at the base.

The root has an aromatic smell like that of valerian,

but more agreeable; and a warm, pungent taste. Its general action on the system, is tonic, stimulant, diaphoretic, diuretic, and antiseptic. In pleurisy, rheumatism and remittent fevers, it has been used with advantage. In typhus and putrid diseases, it is valuable as a tonic to support the vital power; and excite gentle diaphoresis; also valued as a gargle in putrid, sore throat. It may be used alone in tincture, or compounded with other articles for bitters; or it may very profitably be combined with diaphoretic powders.

BARBERIS CANADENSIS.

BARBERRY.

THE barberry is a small tree or shrub, covered with an ash-colored bark, under which there is another, of a deep yellow; this bush grows from four to eight feet high, having long, bending branches, covered with small spots, with some occasional thorns. Leaves are crowded, unequal, smooth, and glossy. Flowers are small, yellow, and pendulous or nodding. Barberry grows mostly on mountains, hills and amongst rocks, in barren, slaty or chalky soils: found in New England; very rare in the Western country.

The leaves, and outer bark, have an astringent, acrid taste; but the inner bark is a good bitter, laxative tonic; useful in jaundice, and putrid fevers, and may be employed either alone, or in combination with other tonics.

The berries contain a red juice, very acrid; this juice is an excellent addition to the drink of patients in fluxes, and malignant fevers, for abating fever, quenching thirst, raising the tone and strength of the system, and preventing putrefaction. From them an excellent sirup or preserve is made, which may be employed with advantage, in the same diseases.

CELASTRUS SCANDENS.

BITTER-SWEET, STAFF-VINE.

BITTER-SWEET is treated of by Dr. Cox, and some others under the name of *Solanum Dulcamara*; but from the best information we have had an opportunity of obtaining, this name belongs to a plant quite different from the one now under consideration. The woody nightshade is the plant, that bears this name; it is true, Dr. Cox makes the woody nightshade, and the bitter-sweet, one and the same thing; but we incline to the opinion that the Dr. was betrayed into a mistake.

The bitter sweet is a woody vine, climbing trees from ten to thirty feet; and when nothing is within its reach to entwine itself upon, it runs along the ground. When a small sapling happens to stand near one of those vines, it often climbs it in a most beautiful, spiral form; and is then frequently cut off, and converted into a walking stick; it is from this, that it receives the name of staff-vine. The roots are large, long, and of an orange red color: leaves are long and pointed; of a light green color: berries hang in bunches, turning red in the fall.

The bark of the root is tonic, diaphoretic, diuretic, and antiseptic. A tea of it, has acquired the reputation of being a most valuable article to remove obstructions of the liver and spleen, and also to increase the secretion of urine. As an external application in poultice or ointment, it is good for hard tumors, indurated swellings of every description; also for swellings in the breasts of females, and in the udders of cows, it is most excellent.

DR. SMITH, author of the "Botanic Physician," says that this article, increases all the secretions and excretions, particularly sweat, urine, and stool, while at the same time, it operates in a most happy manner as a tonic. It is a good discutient, detergent, and resolvent; and may be employed both externally, and internally. It is peculiarly beneficial in all real liver complaints, and in all cutaneous diseases; also in rheumatism, scir-

rous swellings, ill conditioned ulcers, scrofula, whites, jaundice and obstructed menses. Cancers of the breast have been cured by the application of the juice over the cancer, and the green leaves over the breast.

For internal use, boil two ounces of the bark of the root in a quart of water; of this, take a gill three times a day. For fevers, and dropsical swellings this article will be found useful.

CHELONA GLABRA.

SNAKE-HEAD, BALMONY, TURTLE-HEAD.

This plant has a perennial root: its stem is sometimes erect, often decumbent, angular or square: flowers terminal, of different colors, in the different varieties of this plant, as white, spotted with red, and purplish; and of a most uncommon shape, resembling the head of a snake with its mouth open. Its leaves are opposite, and bear some distant resemblance to mint leaves, of a dark green, when fresh, turning quite black on drying; and have an intensely bitter taste.

The snake-head is a very powerful bitter tonic, and one of the best things to promote the appetite, and strengthen the digestive organs, that we are acquainted with, among the simple articles of *materia medica*.

The leaves are considered the best part, and may be used either in powder, decoction, or tincture in wine; and is useful for fevers, jaundice, eruptive diseases, biles, sores and piles. Dr. Smith says that there are but few if any articles superior to it, as a vermifuge or medicine to expel worms, rarely failing to produce the desired effect.

Rafinesque says that this plant is an active purge.

CONVALLARIA MULTIFLORA.

SOLOMON'S SEAL.

THE leaves of this plant are ribbed, oval-oblong, of a dark green color, alternate, and clasping the stem. Its flowers are numerous, hanging along the side of the stalk, axillary to the leaves.

The roots of Solomon's Seal, are a mild tonic, and a healing restorative, useful for weakly females, in whites, and immoderate flow of the menses; also for general debility and diseases of the lungs.

This plant may be used either in tea, sirup, or cordial. From the roots, is obtained a mucilage, said to be valuable for inflammation, and piles, used externally.

COPTIS TRIFOLIA.

GOLD-THREAD, MOUTH-ROOT.

GOLD-THREAD has a perennial, creeping, fibrous root, of a bright yellow color. Its leaves are ever-green, growing on long, slender petioles or foot-stalks, three together. The flowers are white and yellow, growing on a separate scape or stem. Northern latitudes alone, are congenial to the growth of this plant, where it is found in mossy swamps and bogs of ever-green woods; also found on the rocks of the White mountains, in Newfoundland, and Labrador.

Gold-thread is ranked among the best bitter tonics; and *materia medica* can boast of few, if any, superior to it, in promoting digestion, and strengthening the system; and it is useful in all cases of debility. It has acquired considerable reputation for its efficacy in removing canker, and curing sore mouth; hence it is sometimes called mouth root. The roots alone, of this plant, are used for medicinal purposes, and are employed either in powder or in tincture, in doses of a tea-spoonful three times a day.

CORNUS FLORIDA.

DOG-WOOD, BOX-WOOD, BOX-TREE.

Dog-wood is found in every part of the Union; and is so well known that we deem any description whatever, as wholly unnecessary. The inner bark either of the trunk or roots may be used: that of the roots is considered best. Dog-wood bark is tonic, astringent, anti-septic, and stimulant; and may be used in powder or infusion. By many reputable physicians, it is esteemed equal, or even superior to the chincona or Peruvian bark, particularly in intermittent, remittent and typhus fevers. The bark ought to be dried before it is used, as it is apt to affect the bowels in the fresh state. A decoction of the flowers is said to be good for colic.

For the disease among horses called yellow water, the decoction of the dog-wood bark is a most excellent remedy. Let the horse have nothing else to drink, but the dog-wood tea, until a cure is effected.

CORNUS HERCULES.

HEAL-ALL, AGUE BARK, BURNING BUSH.

THIS is a shrub growing from ten to twenty feet high; and is covered with a smooth, dark gray colored bark, interspersed with large, white, irregular shaped spots. Branches shoot up at very acute angles, and there are generally three together. The extreme portions of the branches, which constitute the growth of the preceding year, are of a dark green color with dark spots. Leaves are petiolate, opposite, oblong, acute, serrulate, deep green on the upper, and light on the under side. Flowers are small, deep red inside, inclining to gray outside. Berries, which ripen in the fall, are of a bright fiery red color, which has procured for this shrub; the name of *burning bush*.

The part employed for medicine, is the bark of the root; and the proper time for gathering, is when it peels easiest. This bark when dry, is of a brown color outside, and white inside, being rough, wrinkled much, resembling in its appearance, the dried root of the spike-nard. It has a peculiar, warm, pungent, bitter taste.

This bark is tonic, expectorant, and stimulant; and is useful in most cases of debility. By some, it is highly recommended in the intermittent fever, or fever and ague. Some years ago, the tincture of this bark, under the cover of an unmeaning, unintelligible name, was sold at a high price, as a nostrum for the consumption; and it still has some reputation in that complaint. This article may be used either in powder, or tincture; of the powder from one fourth to a half tea spoonful, three times a day, or a table-spoonful, same number of times a day, of the tincture, is the proper dose.

EUPATORIUM PERFOLIATUM.

BONESET, THOROUGHSTEM, THOROUGH-WORT, CROSS-WORT, INDIAN-SAGE.

BONESET is found in swamps, marshes, and wet meadows, throughout the United States. It has a perennial, crooked, fibrous root, running horizontal, sending up many stems, from two to four feet high, hairy, of a pale or grayish green color, branched towards the top. Leaves opposite; and so formed as to have the appearance of being penetrated by the stem through the center, where they are broadest, and gradually tapering to a point; the whole leaf has a rough, woolly appearance. Flowers are of a dirty white color, growing in dense terminal corymbs.

The medical properties of this plant are various and active: it is tonic, sudorific, antiseptic, diuretic, stimulant, cathartic, and emetic. Large doses of the warm decoction, operate as an emetic; and in smaller doses

it acts as a powerful tonic, strengthening the stomach. The warm infusion, given in doses sufficiently large to create nausea, produces an increased discharge from the skin; and is found to be a most excellent remedy for catarrh or violent colds. In all intermittent and remittent fevers, it is esteemed as more beneficial than the Peruvian bark; for if the Peruvian bark be administered when there is any fever on its effects are dangerous; but the boœset may be given when there is considerable fever, with the most salutary effect, as its active sudorific powers always tend to diminish the fever. A free use of the warm infusion of this plant in the incipient stages of the fever, generally throws it off, giving entire relief. It is also said to be good for the bites of snakes and poisonous insects; and obstinate constipation of the bowels. For this last purpose, give a tea-cupful of the cold infusion every half hour until it produces purging. The warm infusion is an excellent article for coughs, asthma, hysterical complaints. For dropsy, this article has been used with some success. The leaves are the part used, and may be used in sirup, as well as in infusion; the sirup is less disagreeable to the taste than the infusion.

EUPATORIUM PILOSUM.

WILD HOARHOUND.

WILD HOARHOUND is a native of the Southern States, where it grows in great abundance; and has obtained great reputation as a domestic remedy for the prevailing fevers of that climate.

Dr. Thatcher's *materia medica*, contains the first authentic account, of this plant. It operates as a tonic, diaphoretic, diuretic and mild cathartic. As a tonic, it is much used on the Southern sea-board, and is esteemed as superior to the Peruvian bark, in the cure of fevers. The usual mode of employing it is in the form of infusion, which is made of the dried leaves, one ounce to a

quart of water, and taken in doses of a half a tea-cupful, more or less according to the constitution, every two hours.

The wild hoarhound may be advantageously used in all cases where laxative tonics are needed, either alone or combined with other tonics.

FRASERA VERTICILLATA.

COLUMBO ROOT, MEADOW PRIDE, INDIAN LETTUCE.

This valuable plant grows in the Western, Southern, and South-western states; and is in some places very abundant, in others rare. Its root is triennial, that is lasting three years; it is rough, spindle-shaped, yellow, running horizontal, sometimes to the length of two feet. Its stem rises from five to ten feet high, erect, smooth, with few branches, except near the top, where they form a handsome pyramid, crowned with numerous flowers of a yellowish white color. Some of the leaves are radical, forming a star, spreading out on the ground; the remainder of them grow in whorls around the stem, from four to eight in a whorl, each whorl, as it is nigher the top, contains smaller leaves.

The columbo root in its fresh state, is both cathartic and emetic; but when dry, it is an excellent bitter tonic and antiseptic. Useful in fevers, colics, indigestion, debility, diarrhea, &c. For gangrene or mortification, used internally and applied externally in poultice, it is a good remedy. A tea-spoonful of the powder taken in hot water, generally relieves the oppression of an over loaded stomach, so common with the dyspeptic and other weak patients. Taken in cold water it is not so apt to nauseate, and in many cases is equally good. The tincture is a valuable family medicine, useful to strengthen the digestive organs, and increase the appetite.

GENTIANA PERFOLIATUM.

GENTIAN, YELLOW GENTIAN.

GENTIAN grows mostly in dry, oak and hickory lands, though sometimes found in other kinds of land. It has a round, long, tapering, perennial root, of a darkish-brown, or light color: its taste is pungently bitter, leaving a biting, warm impression on the tongue, and in the mouth. Stems are many round, erect, hairy, two or three feet high. Leaves are opposite, lower ones connate at the base, which means that the two leaves grow together so as to have the appearance of being but one, with the stem passing through the center. Flowers from two to six in number, growing at the base of the leaves, of a reddish color; and are succeeded by large, yellow berries, crowned with four or five leaflets, which are the calyx of the flower.

The gentian root is tonic, stimulant, and cathartic. Useful in most cases of debility, and in intermittent fevers; and in all cases where laxative bitter tonics are needed, this article may be employed. In large doses, it operates as a purge. This article is regarded as a most valuable ingredient in bitters, whether the object be to increase the appetite, or give tone to the system. It may also be taken alone, in infusion, in doses of a tea-cupful three or four times a day. It is said to be an excellent remedy for dyspepsy; and will prevent food from souring on the stomach, enabling the stomach to bear and digest diet, that before produced oppression and dejection of spirits.

HYDRASTUS CANADENSIS.

GOLDEN SEAL, YELLOW ROOT, INDIAN PAINT.

GOLDEN SEAL, has a rough, crooked, wrinkled, knobby, perennial root, of a bright yellow color, with many

long fibers. Stem round, straight, growing from eight to fourteen inches high, bearing commonly, two rough leaves at the top, bearing some resemblance to the leaves of the sugar maple; it has but one flower, which is succeeded by a red, fleshy berry, containing many seeds.

Golden seal is a most excellent bitter tonic; and may be used with great advantage during recovery from fevers, or in most cases of debility and loss of appetite. It is a most excellent article in dyspepsy, or any other complaint, to remove the disagreeable sensation of fullness and depression arising from indigestible food. A tea-spoonful of the powdered root infused in hot water sweetened, may be taken at a dose, or if you prefer it, you may combine it with other tonics.

Some respectable physicians bear testimony to the efficacy of a decoction of the golden seal, as a remedy for sore eyes, and also for other local inflammations, externally applied as a wash or fomentation.

LIRIODENDRON TULIPIFERA.

YELLOW POPLAR, TULIP TREE, WHITE-WOOD.

THIS noble, and beautiful tree, is one of the stately ornaments of our own native forests, where it sometimes attains a great size.

The bark both of the root and trunk of this tree, has long borne considerable reputation as a bitter tonic. It is a strong bitter, and is somewhat aromatic, astringent, and anthelmintic. The bark of the root is the best; and has been found very valuable in dyspepsy, hysterics, dysentery, and for worms. In some sections of country, it has become a popular remedy for worm complaints. The pulverized bark may be given in half or whole tea-spoonful doses. The best time to gather the bark of the root, is the latter part of winter, or the early part of spring.

MENISPERMUM CANADENSIS.

YELLOW PARILLA, VINE MAPLE.

THIS vine grows mostly in rich moist lands, in creek, and river bottoms. It has a long, yellow, woody, perennial root, with but few fibers. Its stem is a woody vine, small, dark green, running from three to nine feet high, twining around whatever happens to be near it. It has only a few scattering leaves, which are deeply indented, and in shape resembles the maple leaf.

The root is the part employed as medicine; and it is an excellent laxative bitter tonic; and has been found very useful in all cases of debility, giving tone to the stomach, and vigor to the nervous system. Some practitioners, repute this root as a valuable medicine for worms. Dose, a tea-spoonful of the powdered root, in hot water sweetened;—for children, half that quantity, and if very young, a fourth.

POPULUS TREMULUS.

QUIVER LEAF, QUAKING ASP, POPLAR.

THIS tree is very common in many parts of the United States, growing sometimes large enough for saw-logs. The leaves are round, smooth on the surface, and jagged on the edges; growing on petioles, or foot stalks, which are flattened transversely with the surface of the leaves, by which the least motion of the air affects them, keeping them almost in continued agitation, when the air is not strong enough to move any other leaf; hence it has obtained the name of quaking asp.

The bark of this tree, is the part used for medicine; and is one of the best bitter tonics. It may be used either in powder, decoction, or tincture; and is reputed valuable for diarrhea, obstruction of urine, indigestion, faintness at the stomach, consumption, and also for

worms. This bark may be compounded with other tonics, or it may be used alone:—dose, a tea-spoonful of the pulverized bark.

TANACETUM VULGARE.

TANSY.

COMMON tansy is a perennial plant, sometimes growing wild by the road sides, and about farms; but it is mostly cultivated in gardens, both for culinary and medical purposes. It flowers in June and July.

Tansy is a warm bitter, accompanied with a strong flavor, not very disagreeable. Some physicians give this plant the credit of being a most excellent remedy for hysterical affections, particularly those produced from a deficiency, or suppression of uterine purgations. The leaves, and especially the seeds, have been reputed as a valuable medicine for worms. An infusion of tansy has been highly recommended as a preventative of the return of the gout.

XANTHORIZA APIFOLIA.

YELLOW-WOOD, PARSLEY-LEAVED YELLOW-WOOD.

YELLOW-WOOD is a small shrub, a native of the Southern States; and we have lately learned, that it is also found in great abundance, along the Ohio river. It grows from two to three feet high, with smooth bark, about the size of a large goose quill; the wood a bright yellow. The leaves are crowded together on the top of the stem, and deeply indented with acute teeth. Flowers of a dark purple color, on drooping racemes or spikes. From the root, which is sometimes near a foot long, and about the thickness of the little finger, spring up many scions or suckers.

The bark of the root is the part used for medicine; and it is a pure bitter tonic. Its medicinal virtues are similar to those of the celebrated columbo root. Dose, from half to a whole tea-spoonful of the powder in warm water: useful in almost all cases where bitter tonics are needed.

SAMSON SNAKE-ROOT.

THIS is a native of the Southern States. We are not acquainted with it; nor have we a very correct account of it at hand. The roots are supposed to bear some fancied resemblance to worms or snakes; hence, it has received the name of snake root. Its stem rises from six to twelve inches high, round, jointed; its leaves are opposite, smooth, long, narrow and few: flowers grow on the top of the stem or branches, are tubular, or cylindrical, and of a reddish purple color.

The root, which is the part used for medicinal purposes, is said to be a most valuable bitter tonic, whether used alone, or combined with other tonics. It has been recommended by those who have used it, as an excellent remedy for the dyspepsy, and for weakness of the back and hips, as well as local weakness in other parts of the system.

ANGELICA.

ANGELICA grows in rich loose woodlands, and in hedges; flowering in June and July. It is sometimes cultivated in gardens.

Every part of this plant, but especially the root, partakes of an aromatic virtue: and is useful in flatulent colic. Combined with dog-wood bark, it forms a good tonic for intermittent fevers. A strong decoction of the root, combined with a decoction of red-oak bark, makes one of the best antiseptic washes or gargles for relaxed and spongy gums, and for ulcerated sore throat, that *materia medica* embraces.

CUCUMIS AGROTIS.

WILD CUCUMBER.

THIS tree is a native of the American forest, where it sometimes in fertile soils, attains the height of eighty or ninety feet; and it is frequently known by the name of magnolia. It has beautiful, large, oval leaves; and produces large fruit, bearing some resemblance to the cucumber, from three to six inches long, and nearly all the way of a size, which is generally about an inch in diameter, and contains large seeds. About the end of summer and beginning of autumn, it ripens, turning a beautiful red color. It has a bitter aromatic taste, and tinctured in good spirits, makes a valuable bitter, to increase the tone of the stomach: the bark of the tree or roots, answers the same purpose; also said to be good for persons of dyspeptic habits. Make this tincture pretty strong and use it freely three or four times a day, and it will be found a good remedy for chronic rheumatism; particularly for persons of phlegmatic or weakly habits.

VERATRUM LUTEUM.

IRONWEED.

THIS weed grows mostly in low flats, and meadow grounds; but appears to flourish best in marly soils, where crawfish delight to work. It is a large, tough, hard weed, growing from four, to ten feet high, bearing many, rough, long, narrow, pointed leaves; branching at the top, and covered with many, pale blue or reddish blossoms. The roots are long and tough, and where they get a start, are very hard to root out, sometimes destroying a good meadow. The root, which is the part used for medicine, is an excellent bitter tonic: in tincture it is a good stomachic, or medicine to strengthen the

stomach. An infusion of the roots is said to be good for worms. The root of this weed forms a constituent in Dr. Wright's famous consumption beer.

ROSIN WEED.

ROSIN WEED adds another proof to the proposition, that infinite wisdom, and divine goodness, have furnished every country with the essential articles of medicine necessary to heal our diseases. This valuable plant, grows in great abundance in the prairies of the West, and Northwest, supplying the place of pine, which does not grow there.

This weed grows from three to six feet high, with rough, coarse, thick stems. Leaves are large, partly radical, the remainder grow irregularly up the stalk. Wherever the stalk is broken, or the bark peeled off, the rosin exudes from it, adhering to the stalks in large gutta or drops, which on drying, form hard, brittle lumps from the size of a pea to that of a small marble. So nearly does it resemble the pine rosin, in its color, taste, and smell, that a person not intimately acquainted with both, is scarcely able to distinguish them.

This rosin taken in water, has the reputation of being valuable for weakness of the back and loins; also for rheumatic pains in these parts. The roots sliced and tinctured in good rye whiskey, is said to be a valuable remedy for flour albus, or whites. Dose of the tincture, a table-spoonful, twice a day.

ASH TREE.

THE ash tree is very common in most parts of the United States. The inner bark, particularly of the roots, tinctured in proof spirits, has been highly recommended

by some respectable physicians, as a valuable tonic, particularly in chronic complaints of the liver. This article not only acts as a tonic on the stomach, but exercises the happiest effects, it is said, upon the liver, and the biliary system in general. From the ashes of the bark of this tree, is made one of the best vegetable caustics, known in the healing art.

SINAPIS NIGRA ET ALBA.

BLACK AND WHITE MUSTARD.

MUSTARD is both tonic and stimulant; and is much used by many people with their food to provoke the appetite, assist digestion, and promote the fluid secretions. For this purpose mustard answers admirably, especially for persons of weak stomachs, or those in whose stomachs, much acid prevails, as it exerts a tonic or strengthening influence upon the system without producing any irritating effects, from its stimulant powers.

A table-spoonful of the unbruised mustard seed, taken two or three times a day, operates as a gentle laxative, and increases the urinary discharges; and has been recommended by respectable physicians, as useful in cases of chronic rheumatism, dropsy, palsy and asthma. A table-spoonful of the ground seeds on an empty stomach, will sometimes operate as an emetic.

Take one gill of mustard seed, and a hand-ful of horseraddish, and put them into a quart of wine; and you have an excellent stimulant tonic, which is most valuable for languid, feeble constitutions, or low stages of fever. For a tonic in nervous fever, the mustard whey is reputed to be most excellent:—it is made by boiling six table-spoonsful of the bruised seed in a pint of new milk, and a pint of water, until the curd be perfectly separated, then add a little sugar. Of this whey, take a tea-cupful three times a day.

The mustard poultice, which is made by mixing equal

parts of the crumbs of wheat bread, and the powdered mustard seed, wet with strong vinegar, is an excellent application to parts affected with rheumatism; and also applied to the soles of the feet, and palms of the hands, when the circulation is languid and the extremities cold, it is most valuable to render the circulation more free in these parts. In delirium produced by the fluids tending too strongly to the head, this application, sometimes has a good effect, by producing a revulsion of the fluids from the brain to the extremities.

SWAMP SASSAFRAS.

THIS tree is said to be a species of the magnolia, and is sometimes called by that name. The bark of this tree is the part used for medicine. It is an aromatic, bitter tonic.

This article has considerable celebrity among some tribes of Western Indians, as a remedy for rheumatism. A decoction of the twigs of this tree, is said by respectable authority, to be the fortunate remedy that cured John Dickinson, author of the celebrated Pennsylvania "Farmer's Letters," of a violent attack of chronic rheumatism. Dose, one tea-cupful of the decoction three times a day.

MELISSA OFFICINALIS.

BALM.

BALM is a perennial plant, which is a native of France and Switzerland; but is cultivated in many gardens both in Europe America. Its smell is pleasant, somewhat like the lemon; and its taste is rather a weak, roughish, aromatic. It is gently stimulant and tonic. An infusion taken night and morning, with a little honey and vinegar, is very good for old colds. The infusion is said to be good in hysterical and nervous weakness,

also in fevers, of the nervous type; and in intermittent fever, drink as much as you can hold, hot as you can bear it, just at the approach of the chill.

Said a good old daughter of Erin, who had seen seventy winters, "I gin ne'er had need o' any apothecary drugs in a' my life." On being asked how she had preserved her health so long. She replied in a hasty, agitated manner, Och deare! the bom, the bom: gin I e'er fale the laste squeamish, or doncy, I apply till the bom. An' hod I a wee bit o' the stuff on the great wa-ter, the sa seck wad na come in a league o' me." This old lady certainly had a very exalted, and extravagant idea of the virtue of the balm.

DRAGON'S CLAW.

THIS herb generally grows on mountains and hill-sides: the leaves are radical, growing in a cluster from the top of the root, about six or seven inches high, and are spear-shaped. Its flowers are yellow, and the root black, about the size of cloves, very tender, bearing some resemblance to the claws of the animal, whose name it bears. When this root is pulverised and exposed to the air it will liquify.

The root is tonic and diaphoretic; and has some reputation as a remedy for catarrhs or colds, pleurisy, St. Anthony's Fire; and it is also esteemed as useful in bilious, and other febrile diseases. Dose, a tea-spoonful of the powdered root every hour, or a tea-cupful of the decoction the same number of times.

CHINCOPIN.

CHINCOPIN is a well known shrub, very abundant in many parts of the United States; it is sometimes called

dwarf chestnut, as it bears its fruit inclosed in burs, like the chestnut does.

The inner bark of this shrub is a good tonic; useful to impart tone to the stomach, and strength to the system. But like the Peruvian bark, it must not be administered to patients when there is considerable fever on, as its sudorific powers are too feeble to diminish febrile and inflammatory action, while its tonic and stimulant powers tend to increase such action. Those tonics which possess active sudorific powers may be advantageously given when there is febrile and inflammatory action, as their sudorific powers allay such action while their tonic powers strengthen the system.

CENTAURY.

THIS beautiful plant is a native of the United States. Its root is composed of a few thick, yellowish fibers. The stalk is smooth, square, and branched, rising from twelve to eighteen inches high. Leaves are opposite, oval, and pointed. Flowers are numerous, terminal, of a beautiful, pale rose color; and are in full bloom in the month of July.

Every part of this plant is a pure, strong bitter, highly recommended for its tonic and strengthening powers. It is a most excellent tonic for weak stomachs; and for this purpose should be used in decoction, three or four tea-cupsful a day; always taken when it is cool. As a tonic in fevers it has been much used, and has considerable celebrity. Combined with calamus or angelica root, it forms a most valuable tonic for relaxations of the stomach, and general debility of the system.

COCHLEARIA ARMORACEA.

HORSE RADISH.

HORSE RADISH is cultivated in our gardens for culinary purposes. It is stimulant and tonic, and promotes

the discharge of urine, and perspiration. It is useful in dropsy, palsy, scurvy, and chronic rheumatism. The root sliced in small pieces so as to be swallowed without chewing, and put in vinegar, is said to be good for scurvy. Of this preparation, take two table-spoonsful a day of the horse radish, with as much vinegar. For dropsy the root may be prepared as above, and taken in Holland gin, in doses as above directed, or it may be taken in substance alone two table-spoonsful a day; and for rheumatism, the same way. The root scraped and applied in form of poultice, acts powerfully as a local stimulant.

The sliced root steeped in vinegar, is used by many persons as a condiment with their meat to provoke the appetite and promote digestion, which is certainly useful for persons of sedentary habits, and those of feeble digestive powers. Some respectable physicians recommend this same preparation as an efficacious disentient to remove freckles, by taking some internally, and washing with the same externally. Ring and tetter worm, by this same treatment, have been completely cured.

CITRUS MEDICA.

LEMON TREE.

THE lemon tree is a native of tropical regions; but is now cultivated in the Southern States, where it sustains high reputation for its gentle tonic powers, and its cooling antiseptic properties, correcting the putrid tendency of animal food in summer.

The antiseptic properties of the lemon acid, has long since secured it a distinguished place among the remedies for scurvy. Dr. Cutbush, a distinguished, marine surgeon, says, from the very commencement of our navy, it has been used on board our ships with the greatest success, both in preventing and curing disease. The fresh fruit is generally preferred.

Lemonade, or lemon juice diluted with water and

sweetened with sugar, proves a most grateful beverage in bileous and nervous fevers. Saturated with common table salt, it is said to be useful in dysentery, remittent fever, and putrid sore throat. This mixture is recommended as a most efficacious remedy for diabetes, if so, this fatal disease will be disarmed of some of its terrors; for hitherto it has been an unmanageable disease, and in all my acquaintance, from my earliest recollection to the present hour, I have never known a case of it cured by any gentleman of the faculty. Lemon acid is a common remedy against the narcotic, poisonous effects of opium, or other narcotic vegetables.

MENYANTHES TRIFOLIATA.

MARSH TREFOIL, BUCK BEAN.

THIS plant is a native both of Europe and America; and generally grows in spongy, boggy soils. The root runs horizontally in the earth to a considerable distance, and is regularly intersected with joints, at the distance of half an inch from each other. Stalks are long, bearing each three leaves. Flowers are white, and tinged with red. The root has long maintained a place in *materia medica* as a powerful bitter tonic. When taken in small doses of about a quarter of a tea-spoonful of the powdered root, it imparts vigor to the stomach, and promotes digestion. A decoction of this root is good for cutaneous diseases of the herptic, or cancerous kind. Some respectable physicians say it is good for the gout; the celebrated Boerhaave being relieved himself from this painful disorder, by drinking the juice of this plant mixed with whey.

CITRUS ARANTIUM.

ORANGE TREE.

THE orange tree is a beautiful ever-green, and though a native of tropical regions, is now successfully culti-

vated in the Southern states. Of the orange there appears to be several varieties, but they may be mostly referred to the bitter or Seville orange, and the sweet or China orange. The orange acid is deservedly esteemed for its usefulness in quenching thirst, and diminishing heat in febrile diseases. The acid of the rind is said to be a good stomachic, promoting the appetite, warming the habit, and strengthening the tone of the viscera; and from its tendency to prevent the putrefaction of animal food, it must continue to be a useful article especially in Southern latitudes. Orange acid is said to be one of the best antiscorbutics, and highly useful in the genuine scorbatus or sea-scurvy. It is likewise esteemed a good antiseptic; useful to prevent mortification in inflammatory fevers. A poultice of the roasted pulp of oranges, has great reputation, we understand, in some of the West India Islands, as a valuable application to fetid sores. The orange-peel is considerably warmer than that of the lemon, and contains more essential oil; and it is to this circumstance we must look for the reason why the flavor of the former is less perishable than that of the latter.

Orange wine is highly esteemed by some of the planters, as a pleasant, useful summer beverage; and the following is the recipe for making it:—Take ten gallons of water, and to it add thirty pounds of sugar; boil them twenty minutes, skimming constantly; then take it off, and when cooled to about blood heat, add the juice and outer rinds of eighty oranges, rasping, or sheering the rinds very fine; then put it in a proper vessel, leaving it open three days; after that, cork it up six months, when it will be ready for use.

PUNICA GRANATUM.

POMEGRANATE.

The pomegranate is a shrub or low tree, growing wild in Italy and other countries in the south of Europe. It

is sometimes cultivated in the gardens of this country; but the fruit rarely comes to perfection. The fruit is pleasant, and possesses in some degree, the properties of allaying heat, and quenching thirst, like other subacid, summer fruits. The rind is a strong astringent, and boiled in sweet milk and drank freely, has been used with great success in dysentery, diarrhea, and other diseases requiring astringent medicine. The flowers, which are of a beautiful red color, resembling a dried rose, possess the virtues of the rind, though less powerful.

ARALIA SPINOSA.

PRICKLY-ASH, PRICKLY ELDER.

PRICKLY-ASH is a perennial shrub, which grows mostly in rich, wetish lands, to the height of ten or fifteen feet. The bark is of an ash color, and the leaves bear some resemblance to those of the elder. The stem and branches are defended by sharp prickly spines.

The bark and berries have a warm, pungent taste, and are slightly tonic. Its chief celebrity however, is derived from its efficiency as a remedy for chronic rheumatism. Many physicians place great reliance on this article in rheumatic complaints. It is mostly administered in decoction, which is made by boiling an ounce of the bark in a quart of water; and of this drink a pint a day, diluted with water to lessen its pungency, and render it more palatable.

The same treatment is said to be effectual in old venereal disorders, giving entire relief to the nocturnal pains, and disposing the ulcers to heal. A tincture of the berries, is good to prevent the aching of decayed teeth; it is also said to be good for flatulent colics; and for rheumatism, in persons of cold phlegmatic habits, it is better than the decoction.

CORIANDER.

CORIANDER is an annual, umbelliferous plant, which grows spontaneously in the south of Europe. In this country it is cultivated in our gardens both for medical, and culinary purposes.

In doses of a tea-spoonful, the coriander seeds have been found useful for indigestion and flatulence arising from indigestion. The seeds have a warm aromatic flavor; and form an excellent ingredient in bitters, both as a medical agent, and as a corrector of the bad taste of other articles.

SALIX.

WILLOW.

OF the willow, there are several varieties, as the red, white, smooth, great-leaved, and crack-willow, that botanical writers have noticed; and all of them possess properties that are in many respects similar.

Stone, James, White, Wilkinson, Cullen, and Cutler, have recommended the bark of it, as a tonic, that may be advantageously employed as a substitute for the chincona or Peruvian bark, in fever and ague. Dose, a half tea-cupful three or four times a day.

BETULA LENTA.

BLACK BIRCH

THIS tree is so well known, that any description of it would be superfluous. Both the smell and taste of the bark resembles that of the winter-green. It is deemed a good tonic; and is very useful to restore the tone and strength of the bowels after a dysentery. The form of using it, is a decoction of the bark, drank freely. It is also said to be useful to promote the discharge of urine, and remove female obstructions.



CLASS, NO. X.

CATHARTICS.

CATHARTICS are a class of medicines, which by quickening the peristaltic motion, increase the frequency of the stools. Of this class of medicines, there are two kinds, which are distinguished by their degrees of activity. Those which operate mildly are called laxatives, and those which operate more violently or actively, are called purgatives, the harshest of which are called *drastic purges*. We shall place all the articles, both laxatives and purgatives, under the general head of cathartics. Of the propriety of using this class of medicines, and the indications to be answered by their use, we shall have occasion to treat in another place.

AMYGDALUS PERSICA.

PEACH TREE.

THE peach tree, not only affords us an excellent, and delicious fruit; but also furnishes us with some valuable medicine. Medical virtues of great value are to be found in the bark, leaves, blossoms, kernels, and gum.

A tea of either the bark, leaves, or flowers, is esteemed an excellent purgative of the milder class, and may be safely administered to young or old; and is useful in colics, bowel complaints, worms, fevers, and in short in all cases where mild purgatives are needed. Of a strong tea or decoction, a tea-spoonful may be given to children every half hour until it operates; to grown persons give it in larger quantities. This article also operates as a tonic and diaphoretic; and is reckoned one of the best simple remedies in the compass of medicine for bloody

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urine; and it is supposed that it might be found beneficial in other complaints of the urinary organs. A free use of the tea of the peach tree leaves, or bark, for two or three days, at the commencement of a fever, has frequently been known to throw it off entirely; but if the patient will also drink pretty freely of a tea of diaphoretic powders, and aid the perspiration by the application of a warm rock to the feet, there will be little danger of his breaking the fever in its forming stage.

The kernels taken from the peach stone, is a very useful and powerful tonic in cases of extreme debility, and may be advantageously combined with other articles, and administered in the form of cordial or sirup. Where the patient prefers it, he may in most cases, use the sirup instead of the tea:—the sirup is made by boiling in a strong tea of the leaves or bark, nearly an equal quantity of molasses or honey, over a slow fire.

Dr. Smith, of New York says, "Peach pits tinctured in brandy, in proportion of four ounces to a quart, form a powerful tonic useful in most cases of debility, and is remarkably efficacious in curing the whites." Of this tincture, the dose is a tea-spoonful three or four times a day.

The gum which exudes from the peach tree, is said by respectable physicians, to be superior in many respects to the Gum Arabic.

CASSIA MARILANDICA.

AMERICAN SENNA, LOCUST PLANT.

AMERICAN SENNA is found in most states in the Union, growing generally in rich soils, and near streams. It has a crooked, woody, fibrous, black, perennial root. From the root, rise several stems, which are round, upright, nearly smooth, growing from three to six feet high. Its leaves are alternate, large, and composed of many small leaflets growing in pairs on one central stem or

petiole. Flowers are of a bright yellow, forming a sparse cluster at the top of the stem. The fruit consists of long pods, a little swelled at the seeds, or resembling in some slight degree, the fruit of the locust, though not near so broad.

The American senna is cathartic, "Operating" says Rafinesque, "with mildness and certainty, at the dose of an ounce in decoction." Thacher says, "A half an ounce of the leaves in half a pint of hot water is the proper dose for an adult." Either the leaves or pods may be used.

GAMBOGIA.

GAMBOGE.

GAMBOGE is a gum resin obtained from a tree, says Dr. Cox, of middling size, which grows in Siam, Ceylon, and the East Indies. The best is of a deep yellow color, with out smell, and has but little taste.

This gum is a very active cathartic, and also operates as an emetic. Its great activity as a drastic purge, renders it an improper purgative to administer alone; but it may be advantageously combined with other substances of a mild cathartic nature to give them activity. Combined with an equal quantity of vegetable alkali, it is said to be one of the surest articles to expel the tape worm. For this purpose it is taken in doses of fifteen grains, although four grains of it taken alone will operate as a purge.

JUGLANS CINERIA.

BUTTERNUT, WHITE WALNUT.

THIS tree is well known in the country by the name of the white walnut. The inner bark of this tree, and especially of the root, is esteemed by many physicians

as a valuable purge, that operates efficaciously, yet mildly, without injuring the tone of the viscera. It may be employed with advantage in diarrhea, dysentery, and worms.

Butternut may be administered either in extract, pills, sirup or cordial. For preparing the cordial, the following is perhaps as good a method as any:—Of the fresh, inner bark of the white walnut, take any convenient quantity, and beat it with a hammer until soft; then pack it closely into an earthen vessel, and pour boiling water on it, sufficient to cover it completely: when this is done, place it over a gentle fire and let it simmer from one to two hours; after which you must strain off the liquor, and add sugar or molasses enough to make a sirup; then bottle it up, adding one third the quantity of proof spirits to preserve it for use. Dose for a child, is about half a table-spoonful, repeated at intervals of thirty or sixty minutes, as the urgency of the case may require, until it operates; and for grown persons the dose is much larger, which the judgement of the one who administers it must determine, according to the idiosyncrasy of the patient, whether he be hard to operate on, or whether he be otherwise. This sirup has considerable celebrity among, and is much used by the “Botanic practitioners,” in a great variety of cases, where they deem it proper to evacuate the bowels by means of a purge.

LEPTANDRIA ALBA.

BLACK-ROOT, BRINTON-ROOT, BOWMAN-ROOT.

BRINTON-ROOT is generally found growing in wetish lands, near streams, and open glades or plains. It has a dark colored, perennial root which grows from a long, woody caudex or head. Several round, hairy, stems spring up from the same root, growing from two to four feet high, and branching towards the top, branches bear-

ing on their tops a spike or tassel of white, crowded flowers. Leaves long, narrow, pointed, and their edges indented with unequal teeth, growing in whorls of four or five to a joint.

Practitioners, who profess to be well acquainted with the black-root, give it a high recommendation as an efficient purge, operating with mildness and certainty, without producing that depression of the living powers, which so commonly results from the operation of purgative medicines. In typhus and bilious fevers, it is reputed the most appropriate purge to carry off the tarry, morbid matter, from the intestines, which this root effects without destroying the tone of the bowels, or leaving behind it the deleterious, poisonous sting, that so often remains after the use of *calomel*, which has been so generally relied on, and so fatally employed by gentlemen of the faculty. The dose is a heaping tea-spoonful of the powdered root in a gill of boiling water, repeated in three hours if it do not operate in that time; it may be sweetened if desired by the patient.

This root is also a diaphoretic, tonic, and antiseptic, which properties added to its cathartic powers render it so valuable to evacuate the bowels in fevers. Dr. Smith says that his father "used the brinton-root to cure the pleurisy with amazing speed." With the famous Indian Doctor *Hough*, this root was a favorite medicine. His own words on this subject, shall represent his ideas; "It is the mildest and most efficacious purge in fevers, and in disorders of the stomach or bowels, to destroy viscous humors in the blood, to remove costiveness, or to cool fevers."

With the Wyandot Indians, we understand, this root is held in great estimation, as a mild, efficient, healing purge.

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PODOPHYLLUM PELTATUM.

MAY-APPLE, MANDRAKE.

THE may-apple is a well-known plant, growing in shady, moist lands; and is found in most parts of the United States. It has a long, round, perennial root, running horizontal in the ground, jointed, with fibrous roots issuing at each joint. Stem erect, smooth, round, from eight to sixteen inches high, each branch bearing a single, large leaf. Flowers large, white, only one to each stem, growing from the forks of the stem.

By some the root of the may apple is considered poisonous, and consequently unfit for medicine: others, professing to speak from experience, represent it, as a most valuable medicine. We have never tried it, and therefore, are not furnished with data from personal experience, to say which of them is right. One thing, pretty generally agreed on among medical writers, is that in small doses of from half to a whole tea-spoonful, it is a safe, and certain purge; but in large doses it is a very active, *drastic* purge, not fit to be used, and often injurious to weakly persons.

For incontinence of urine, Dr. Lobstein recommends it as an unsailing remedy; for dropsy, and pleurisy, it is also said to be good. Some of the Cherokee Indians, recommend a few drops of the juice put into the ear, as a valuable remedy for deafness. The Wyandot Indians roast the may-apple root, and employ it in that way, which they say destroys its poison, if it contain any, and renders it less drastic as a purge.

The celebrated Indian doctor Hough, recommends the powdered root as a valuable escharotic to cleanse foul and ill conditioned ulcers, disposing them to heal up, by removing the morbid matter, destroying the proud flesh, without injuring the sound, and promoting the exfoliation of carious or rotten bones. He directs the powder to be sprinkled on the affected part once in from two to five days.

The same application has often proved efficacious in curing the poll-evil among horses.

RHAMNUS CATHARTICUS.

BUCK-THORN.

BUCK-THORN is a shrub growing in woods and about hedges, and attains the height of ten or fifteen feet; it flowers in June, and its fruit ripens in September. The berries have a faint, disagreeable smell, and a nauseous bitter taste. Gentlemen of the faculty, have long esteemed them as a cathartic, and ascribed to them considerable efficacy in dropsy and rheumatism. This article, we understand forms an ingredient in Dr. Reed's celebrated antibilious pill. We can not recommend this article for a purge, unless in combination with other articles, that would moderate its effects:—given alone, they produce griping, sickness, and dryness of the mouth and throat, leaving a thirst of a long continuance. Used in decoction as a wash, the bark of this shrub is said to be tonic, and antiseptic;—useful it is said, to reduce inveterate inflammation of the eyes, and for curing the itch, as it cleanses the skin, and relieves the burning heat without repelling the humors.

RHEUM PALMATUM.

RHUBARB.

RHUBARB is a native of some parts of Asia, and of the East Indies; but is now cultivated both in Europe and America, for medicinal purposes. The root now used in the shops, is imported from Russia, Turkey, and the East Indies; but that which is cultivated in our own country, is said to be equal to the best imported, and superior to the majority of that which is imported. The rho-

barb root is not fit for use, or at least ought not to be used, until it is from six to ten years of age. The proper time to take up the root is early in the spring before the leaves spring up, or late in the fall, after they have decayed. When taken up, the roots should be washed clean, and the small fibers together with the external rind pared off; after which they must be carefully hung up in a dry place, no two touching each other, lest they mould, until completely dried, which will require from six to twelve months.

For many purposes rhubarb is a valuable, mild purge, not only evacuating the bowels, but its tonic powers exert the happiest influence upon the tone of the stomach and bowels, and it is on this account, that it is so valuable in bowel complaints. This root should not be used in costive habits, as it has a tendency to leave the bowels in a costive state, after its operation. The bad taste of this article may be corrected by adding a little cinnamon to it. Dose, from one to two tea-spoonsful of the pulverized root.

SESAMUM ORIENTALE.

BENNE PLANT, OILY GRAIN.

THIS valuable plant is a native product of Africa; but of late years, the seeds have been introduced into South Carolina and Georgia, by the African negroes, where it has become well known, and highly prized, under the name of *Benne*; and in the West Indies it is known by the name of *Vangloe*. It has a large, herbaceous, four cornered stalk, rising from two to four feet high, sending out a few, short side branches. Leaves are opposite, oblong, oval, and a little hairy. Flowers are small, of a dirty white color, succeeded by the seeds, which ripen in the fall.

The seeds yield a greater proportion of oil than any other known vegetable. One hundred pounds of the

seeds, will yield ninety pounds of oil, equal to, and by many, deemed superior to the best Florence oil. This oil will keep many years without contracting any rancid smell or taste; and is found to be an agreeable substitute for all the purposes of salad oil. The oil, it is said, is a good, mild, cathartic medicine, much more pleasant than castor oil; and we also understand, this oil burns well in the lamp.

An infusion of the leaves, affords an excellent mucilaginous drink, which we have repeatedly seen given to children, for dysentery, diarrhea, and cholera infantum, with the greatest success. When the case is an obstinate one, administer an injection of the infusion, as well as make the patient drink freely of it at the same time.

FLUX WEED, WITCH WEED.

THIS is a small weed growing from six inches to a foot high. It has a stiff leaf, full of little prickles or spines, all around the edges;—the seeds are black, contained in small prickly burrs. The seeds are the part used for medicine; and they are gently laxative and anodyne. They are prepared for use by boiling a half tea-cupful of them in a quart of new milk; and of this decoction, give a gill every half hour, until relief is obtained. For dysentery, diarrhea, and bowel complaints generally, this preparation, is said to be a most excellent remedy, giving immediate relief.

SUMPER-VIVUM.

HOUSELEEK.

THIS is the weed that grows on the roofs of old houses, and on old walls:—it flowers in July.

An infusion of the leaves, has some celebrity as a cool-

ing laxative. The juice of this plant, mixed with honey, is recommended by some successful practitioners, as being a valuable remedy for the complaint among children, called the thrush. Stewed with cream, this plant, has been much employed by country people, as a cure for corns, fresh burns, the stings of wasps, or bees, and for external inflammation.

ALOE PERFOLIATA.

ALOE, OR ALOES,

THE article known in the shops of this country, by the name of Aloes, or Socotorine Aloes, is the resinous product of a plant growing in the Island Socotra in the Indian Ocean. Of this plant, botanical writers reckon three species, or kinds, which they distinguish by the names of Socotorine, Hepatic, and Caballine; the first two are considered the best for medical use.

The Socotorine aloes has a dark yellowish red color, a glossy, clear surface, and is in some degree pellucid; fracture unequal; easily pulverized, and when reduced to powder, it is of a bright golden color. Its taste is bitter and disagreeable, though accompanied with a flavor in some degree aromatic. There are two methods of preparing it from the plant:—One is to cut off the leaves close to the stem, and hang them up, so as to let the juice drop out, which is afterwards dried in the sun. The other method is to express the juice, of the leaves, and then boil and skim it, after which it is preserved in skins, and dried in the sun in August.

The Hepatic aloes, is so called, because it is said to have a more direct and specific action on the hepar or liver, than the other kinds have. Of this, there are two kinds; one from the East Indies, the other from Barbadoes. The Hepatic aloes has a strong disagreeable smell, and an intensely bitter nauseous taste, accompanied with little if any, of the aromatic flavor of the Socotorine.

Aloes is a mild cathartic, and tonic; useful in many cases. It is a very safe, innocent cathartic, said to be serviceable to persons of sedentary habits, where the stomach is oppressed and weakened, and the bowels inactive. The Hepatic aloes is recommended as a most excellent corrector of the biliary system. Some physicians recommend it as being good to expel worms.

MORUS NIGRA.

MULBERRY TREE.

The mulberry tree is too well known to need description. Some botanical writers undertake to amuse us with conjectural accounts about the original introduction of the mulberry into our country, from the forests of Persia. But we think that the mulberry must be a native growth of our own forest;—its great abundance in the American forest, is difficult to reconcile with any other idea.

This tree bears a very pleasant fruit, which in common with many other fruits possesses the property of quenching thirst, abating heat, and opening the bowels as a gentle laxative.

A sirap made of the juice of the ripe fruit, has some reputation as a gargle or wash for mitigating inflammations of the throat, and ulcers of the mouth.

The inner bark of the root of the common black mulberry tree, in doses of from half to a whole tea-spoonful of the powder, operates as an excellent purgative; or an equal part of a strong decoction of the bark, and of molasses made into a sirup, in doses of a wine-glassful not only proves an excellent purgative; but has been employed with great success to expel worms, particularly the tape-worm.

Considerable quantities of these berries, are used in some cider countries in making a delicious beverage

called mulberry cider. This drink is made by selecting the ripest mulberries, expressing the juice, and adding it to cider in sufficient quantities to impart to it a perceptible flavor. This mixed liquor has a very pleasant taste, and a deep red color, similar to that of the finest port wine, which properties are undiminished by age. A pleasant vinous liquor, called mulberry wine, may be made from the fruit of this tree, when it is properly prepared and fermented.

WHITE BRYONY.

Low wetish meadow lands and swamps, are most congenial to the growth of this plant. Roots are large, and white. Stems often entwine themselves about bushes, and shoot out to a great extent. Leaves are large, pointed, irregularly toothed, gradually diminishing in size towards the top. Flowers are of a yellow green color, succeeded by a red berry.

A strong decoction of the root strained, and then simmered slowly by the fire, until it becomes the consistence of honey, is reputed a good cathartic. Dose, from one to three tea-spoonsful.

CLASS, NO. XI.

EMETICS.

EMETICS are a class of medicines employed to excite vomiting, for the purpose of cleansing the stomach of its noxious contents. Such a medicine, it must be admitted, is indispensable in the practice of the healing art. At another place the reader will find more said on this indication, in the treatment of disease.

LOBELIA INFLATA.

LOBELIA, EMETIC HERB, &c.

No article in botanical *materia medica*, sustains higher reputation for its medicinal virtues, than *Lobelia inflata* does amongst those best acquainted with its operation, and effects; and it is equally true, that no article has received more unqualified reprobation, and unmerited reproach from the enemies of the botanic system, and those having the least knowledge of its medicinal virtues. We need not be long at a loss for a reason to account for the nublushing misrepresentations of the properties and effects, bestowed upon this article by the enemies of the botanic system of practice, when we reflect that this is one of the important articles, whose active and efficient remedial virtues have contributed no small degree of support to that system of practice, which they have labored so sedulously, but vainly to put down.

Lobelia inflata is a biennial plant, that is, it requires two years, from the time it first comes up, before it comes to perfection, and produces its seed. Stem erect, milky, branched, growing from one to two and a half feet high. Leaves alternate, milky, oblong, acute, serrate and ses-

sile. Flowers small, pale blue, and scattered along the branches. Seed vessel a small, oblong, roundish pod. Seeds many, very small, and brown.

The first year this plant only throws out a few, radical, roundish leaves, which lay close to the ground:—the second year, it produces the stem, branches and seeds. *Lobelia* is a common plant, in many parts of the United States, growing mostly in old fields, and open lands, rarely in the woods. This plant often grows in stubble fields, if left uncultivated the next year after the crop is taken off. When any part of this plant is broken, a milky, acrid juice exudes from the wound, of a most penetrating, diffusible nature. This juice applied to the eye produces a most powerful effect; and hence it is called eye bright.

Materia medica knows no article superior to *Lobelia inflata* as an active, efficient emetic; and indeed, all the experience we have had in the use of emetics tends to confirm the opinion, maintained by botanic practitioners generally, that it has no equal in the class of emetics for its activity and efficacy in throwing off the noxious contents of the stomach, subduing and removing morbid action from the system, and restoring at once a healthy action. In the American Dispensatory, now before us, this article is represented as an emetic, often inducing a most profuse perspiration, immediately after being received into the stomach; and that its effects are much the same as common emetics. In this the author of that work is grossly mistaken, clearly showing his ignorance of its use and effects as an emetic; for all those who have much experience in its use, bear a united testimony, that it differs materially in its effects, from any other emetic with which they have any acquaintance. It not only operates as an emetic in ejecting the contents of the stomach; but, that it throws only the noxious contents off of the stomach; that it extends its effects to every part of the system, checking, subduing, and removing morbid action; that its searching, quickning power extends to every part of the system clearing out obstruc-

tions, and laying hold of whatever part is unfriendly to health. It has been repeatedly stated by physicians reputable both for skill, and veracity, that when the stomach contains no noxious matter, and the system is not affected with any diseased action, that lobelia will not act as an emetic, and is harmless as water. When this article ceases to operate as an emetic it does not, in general, leave the patient so much prostrated in strength as most emetics do. Its active effects often produce symptoms, while operating, that alarm those not much acquainted with it; but in no instance have we ever known its administration to be followed by any lasting bad effects, and this is the testimony borne by all physicians acquainted with its use; for it has been given to the child of one day old, and to the man of four score years. In every instance, it has been found most powerful and efficient in removing disease; but perfectly innocent in its effects. A distinguished physician of a neighboring state, who by the by, is one of the old faculty, avers that he knows from experience that it is an excellent medicine, and that the statements of some medical gentlemen who declare it to be a poison, are untrue, and unworthy of credit, and propagated only for the sake of opposition.

The tincture of lobelia, made by digesting the leaves either green or dry, or the pulverized seeds, ten days in good proof spirits, in a sun heat, comes nearer being a specific for that most distressing complaint, the asthma or phthisis, than any other article known in the compass of remedies. Multiplied testimonials might be adduced on this point, from those who have experienced its remedial powers. This is one of the best articles for the croup that I know of, having used it in that complaint, in all cases, with the most astonishing success.

No remedy, in the bounds of medicine, so far as we are acquainted, is equal to this plant, as an antidote for poisons, whether taken inwardly, or received externally by poisonous bites and stings; and for that most terrible and fatal disorder, the hydrophobia or bite of the mad

dog, it has been found a certain and speedy remedy. Its virtue as a remedy for the bite of a snake has long been known among the Indians. The following circumstance, attested by two men with whom we are personally acquainted, led to the discovery of its remedial virtue for the bite of a snake: Several years since, two men were traveling through the Cherokee country, and witnessed near the road side, a battle between a black snake, and a rattle snake; and whenever the rattle snake would bite the other, it would run to a plant a few yards off, and nibble a little at the leaves, and then return to the battle with apparently renewed vigor. This, they saw it do two or three times. They then concluded to pull up the plant, and wait to see the result. It was not long until the black snake received from the poisonous fangs of its deadly antagonist, a fresh wound,—with speed it ran to seek its infallible antidote. On missing it, the agonizing reptile thrust its nose into the ground whence the roots were drawn, in search of a fragment of the root: but finding none, it ran to and fro in eager search for another plant of the same kind; and finding none, it died in a few minutes, seemingly in great agony. This incident satisfied these men that the plant which they had pulled up was an antidote for the bite of crotle snakes; and as they knew nothing about the plant, they carried that one home with them for a sample. To their great satisfaction, on their arrival at home, they found plenty of the same plant, and although they knew nothing for it, they thought they knew one of its important medical virtues. After Dr. Thomson's books began to circulate in that country, these men ascertained, that the plant they prized so highly as an antidote for poisonous bites, was nothing more nor less than lobelia.

Much more might be added in relation to the virtues of this plant; but as every thing necessary to be known will be found in its appropriate place in the treatment of diseases, we deem it unnecessary to repeat it here, as

we are anxious to prevent our work from swelling to too costly a size.

The best time for gathering this plant is in the latter part of the season when it has arrived at maturity, which will be known by the leaves and pods beginning to turn yellow, at which time the seeds are ripe, they being the most active part of the whole plant. When you gather it, be careful to keep it clean, and spread it thinly over a dry chamber or loft until it dries, taking care to let it have plenty of air, unless in rainy weather and at night the damp air should be excluded as much as possible to prevent it from moulding. It may be remarked in relation to lobelia, that it may be used in any stage of its growth, from the time it first comes up, until it matures, there being but little if any difference in its virtue at any period of its growth.

This article may be used either in tincture, or in an infusion in warm water,—not hot water, for if hot enough to scald, it destroys the virtue of it. In general it will be found a good plan to give this article in small doses repeated every five or ten minutes, until it operates. Of the powdered leaves, it generally requires one tea-spoonful, and sometimes more:—of the tincture, from one to two table spoonsful, to operate as an emetic.

VERBENA HASTATA

VERVAIN, VERVINE.

VERVINE is so common, and well known in the countries where it grows, that we forbear giving any specific description of it. It generally grows in uncultivated fields, in open waste lands, and along the road sides. Of this plant there are reckoned three varieties distinguished, by the names of white, red, and blue vervine, known by the color of their blossoms.

Practitioners, who profess to be acquainted with the properties of this plant, recommend it as a good emetic,

ranking, says Dr. Thomson, next to the emetic herb, in virtue and efficacy; and may be used either alone or combined with thorongh-stem. He also states, that it has been employed with considerable success in the treatment of consumption; and several cases have been cured by its use after the doctors had given them over as incurable. It is likewise an excellent sudorific; valuable in decoction, for colds, and obstructions of any kind. Vervine may be used in a decoction of the dry herb; or in powder like the lobelia. If given in the early stage of fever, it seldom fails to throw it off entirely.

ASARUM.

ASARABACCA.

ASARABACCA is a perennial plant, growing in low lands, and in moist, shady situations. It produces only two very obtuse leaves which rise from the root, and divide from one stem. The root is fibrous, of a grayish brown color externally, and white internally. Both the leaves and roots have a nauseous bitter taste, with a strong, though not a very disagreeable smell.

The pulverized root in doses of a half table-spoonful or more operates both as a cathartic and emetic. Administered in infusion, a hand-ful to a quart of boiling water, is said to be valuable for hooping cough, in doses of a table-spoonful every half hour, or oftener, until it vomits; and in doses of a tea cupful three times a day, it has been successfully employed to remove obstruction of the menses, or monthly courses.

The root of this plant finely pulverized, is highly esteemed as a sternutory; and is regarded as one of the most powerful of all vegetable errhines. Snuffed up the nose, in the quantity of a grain or two, it produces a copious discharge of mucus and a plentiful flow of saliva or spittle. Geoffroy recommends it as an excellent remedy for stubborn disorders of the head, proceeding from

collections of viscid, tenacious matter, for palsies, and for soporific distempers. He states that he has known a paralysis of the mouth and tongue cured by one dose.

INDIAN FEVER ROOT.

This plant has a dark colored, perennial root, running horizontal; sending off many fibers, and has a strong, rich taste. Several stems rise from one root, which are round faintly striped, covered with short, scarcely perceptible hair or down, and grow from two to three feet high.—Leaves are scattered, supported on long foot-stalks, which sheath the stem, and like it, are covered with down, which becomes hard and rough, as the plant attains maturity.—Flowers are large, and yellow.

A strong decoction of the root, when drank freely, operates as an emetic, and gentle apperient; and promotes a free perspiration. Among some tribes of Indians, it is much used in the cure of fevers; and it is said, that in their hands it seldom failed to effect a speedy cure. It is to this circumstance that it is indebted for its present name. There is no room to doubt its usefulness in colds, and fevers; and from what little is known of its virtues, it promises to become an important article in *materia medica*.

GILLENNIA TRIFOLIATA.

GILLENNIA.

GILLENNIA grows generally in light soils, and in woody, or shady places.—Roots branched, and knotty:—stems several from the same root, erect, slender, smooth, of a reddish tinge, considerably branched: Leaves are alternate, and slightly toothed. The flowers are few and scattered.

A decoction made by boiling the root in water has a beautiful red color, and an intensely bitter taste. This plant has long been known, and ranked among the emetics. Professor Bigelow, states that it possesses properties in some degree analogous to those of ipecacuanha.

Dose, from half, to a whole tea-spoonful of the powdered root, taken in four equal portions, one every fifteen minutes until it operates.

IPECACUANHA.

IPECACUANHA is a native product of South America, and this word in the Spanish language signifies emetic root. The word Ipecacuanha is applied in Spanish America, to various plants that possess emetic properties to any considerable degree; hence, that confusion and contradiction, which have so long prevailed concerning the plant from which the officinal Ipecacuanha of the shops is prepared, may be accounted for; and this also accounts for the several varieties found in the shops under the same name.

The best kind, sometimes called the Peruvian Ipecacuanha, is a small, wrinkled, ash-colored root, bent and contorted into a great variety of figures, full of wrinkles and deep circular fissures, extending quite down to a small, white, woody fiber that runs in the middle of each root. The bark is compact, brittle; the fracture smooth and resinous: it has but little smell, and a bitterish, subacrid taste, covering the tongue with a kind of mucilage.

Ipecacuanha is ranked, by many experienced physicians, among the safe and valuable emetics. Administered in small doses, it stimulates the stomach, increases the appetite, and facilitates digestion; in a little larger doses it operates by stool; and in still larger doses it operates as an emetic, by inverting the peristaltic motion of the stomach and duodenum. It is also said to ope-

rate as an antispasmodic, diaphoretic, and expectorant: it is reputed as valuable to check hemorrhages, both of the lungs and womb.

This article has some celebrity for its efficacy in checking the narcotic effects of opium; and is reputed as an antidote for poisons.

The decoction administered by injection, has lately acquired considerable celebrity for its efficacy in dysentery and internal piles.

Ipecacuanha is administered in substance, in powder, in doses of a tea-spoonful, or more if required, to produce vomiting. It is by no means a dangerous article, if you should happen to take a little too much, as it is ejected from the stomach when it operates. The powder may be taken either in warm water or in wine. Vomiting is promoted by drinking freely of warm teas.

AMERICAN IPECACUANHA.

This plant is said to be exclusively a native of the United States; and is found mostly in the Southern, and Western States, growing mostly in loose, moist, and sandy soils, and frequently in beds of almost pure sand. The application of this name to several plants, that possess nearly the same medical virtues, has produced, at least in some parts of the country, some confusion, and contradiction in relation to this plant, as well as the foreign Ipecacuanha; and this difficulty is increased by that variety of shape and color, which the leaves of the genuine American Ipecacuanha, assumes in different situations. The plant here introduced under the name of American Ipecacuanha, has a large, long, white, or yellowish colored, perennial root, which sends off towards the upper part, many smaller roots, about the size of small quills. Stems are of a reddish-color, and sometimes of a pale green, or yellowish hue. Leaves are opposite, oval, and sometimes pointed.

Flowers appear in the month of May before the leaves get their growth:—the flowers are succeeded by triangular capsules or seed vessels, containing only three seeds in each capsule.

This plant is recommended by several distinguished physicians as being superior to the foreign article, and possesses much the same medicinal properties. The root alone is to be used, but being more active than the imported Ipecacuanha, it requires only about half the quantity for a dose.

INDIAN PHYSIC.

SOME writers make no distinction between this plant, and the American Ipecacuanha; but they are certainly two distinct species. It grows mostly in shady woods, and on the sides of rich hills and mountains, from Canada to Louisiana. Its root is perennial, composed of several, long, slender, brown colored branches issuing from one common caudex or head, and running some distance under ground. Stems round, branched towards the top, and commonly of a reddish color. Leaves are of a deep green, long and pointed—flowers nearly white.

The root is the part used, and is esteemed among the Indians as a valuable emetic. It is said to possess many of the properties of the Ipecacuanha. Given in small doses it is both sudorific and tonic. Dose for an emetic, is from one to two tea-spoonsful of the powdered root.

DIRECTIONS,

FOR SELECTING, GATHERING, AND PRESERVING MEDICINES.

EXPERIENCE has sometime since taught me that it is not only necessary to know what vegetables are good

for medicines, and what are the medicinal virtues of each; but that a judicious selection, a careful preservation, and gathering them at the proper period, are matters of the utmost importance in securing the full benefit of their virtues. Inattention to this subject, may bring results of a most serious nature, such as selling or using articles that are damaged, or those of inferior medical powers;—the protracted suffering, and perhaps the death of the patient, is too often the mischevious consequence of such criminal negligence. Such carelessness has frequently brought valuable medicines into disrepute; because their virtues were impaired, by not being gathered at the proper time, or cured and perserved in the proper manner.

1. Be careful to separate and reject every thing from the medicinal article, you may be gathering, that does not belong to it; for want of observing this rule, poisonous, or at least extraneous substances are sometimes gathered with the medicines.

2. *Annual* roots, that is, such as grow from the seed every year, must be gathered just before the flowers put out, as they are then in the highest state of perfection.

3. *Biennial* roots, that is, those which grow up from the seed the first year, live through the winter, attain maturity, bear seed and die, the second year, ought either to be gathered in the fall of the first year, or early in the spring of the second. *Triennial* roots should be gathered in the fall of their second year, or in the spring of their third. *Perennial* roots should be collected either in the fall after the tops and leaves begin to die, or in the spring before they commence growing. Recollect, that roots gathered out of their proper season, sustain a loss of their medical virtues, and are inferior in every respect to those collected at the proper time.

When you have collected such roots as you want for medical purposes, you must then wash them clean, carefully separating, and rejecting every worm-eaten, or unsound piece; nor must you let them stay long in the water, as that will macerate them, and diminish their

virtue. After they are washed, you must then spread them out in a dry, place, taking care to preserve them from getting wet with rain or dew; for if suffered to get wet with either rain or dew, their virtues will be impaired for every such wetting. When perfectly dry, pack them away in jars, boxes, or barrels, and put them in a dry, airy room, free from any damp.

4. Herbs and leaves intended for medicine, ought generally to be collected about the time of flowering, as they are then at their greatest perfection. Some plants, however, when you wish to save the seeds also, may be gathered, just as the leaves begin to change their color from green to yellow, as the seed is then ripe. This is the proper time to gather the emetic herb or lobelia. Herbs and leaves must be dried in the same way, and with the same precautions as the roots, and preserved in the same manner, after drying. Gather them in dry weather, when not wet with either dew or rain. Carefully separate, and reject all that are withered, injured, or imperfect.

5. Barks intended for medicinal purposes, ought to be gathered either in the spring or fall; and taken from young, thrifty trees. Shave off the ross, or outside, leaving only the inside living bark, which you must carefully dry, and preserve as directed for roots and plants.

6. Flowers must be gathered when in perfection, in dry weather when clear of dew or any moisture; and then dried and preserved as directed for other articles.

7. After the roots, herbs, &c. are nicely cured, as above directed, you must spread them in the hot sun until brittle; and then you can reduce them to a fine powder in a mortar, and sift them through a fine sieve. This being done, they should be preserved in jars, bottles, or boxes, in a dry room. Your vessels must be kept close; for if the air is not excluded from your medicines, after they are pulverized, they will lose something of their virtue.

If you wish to prepare medicine on a large scale, you may grind and bolt them in a mill.

DISPENSATORY.

HAVING now finished that part of *materia medica*, which embraces all the simple articles of medicine, that we intend to introduce into this work; and having pointed out their most obvious properties, and their known and acknowledged virtues, together with the mode of preparing them for use, and the manner of administering them, the quantity for a dose, &c., we shall now present the reader with a few of the most valuable compounds, we have been able to prepare or select. This part of the work will be arranged in the form of a dispensatory, for the greater convenience of the reader. Also some miscellaneous recipes, not received, or prepared in time to be arranged under the regular heads.

Some may be ready to conclude that the number of simples, as well as compounds, introduced into this work, is by far too large. We would remark, however, that the number was designedly increased, so that every man could probably find some article in his garden or about his field that would answer the desired purpose. We believe that every country produces the articles necessary to heal the maladies of such country, were the people in possession of the necessary knowledge of the medical virtues of the plants found in each; hence we have been induced to describe a great variety, so that when a man can not find one article, he may find another, that perhaps, would be equally good as a remedy for the various diseases to which his climate is subject, or with which his body may be afflicted. Many no doubt have suffered long, languished, and died, when the very articles that would have proved the healing balm, the potent remedy, perhaps stood neglected on their own farm—neglected because their virtues were

unknown. Is it not then the duty of the philanthropic physician to confer all the benefit he can upon suffering humanity, by diffusing as far as possible, a knowledge of that profusion of remedies, suitable to the wants of the sick, which abounds in every country; we presume there is but little danger of becoming too well acquainted with the valuable medicines our country produces.

ABSORBENTS, OR ANTACIDS.

MEDICINES of this class are employed for the purpose of neutralizing, or correcting the acidity of the stomach. Many persons are afflicted with a sourness of the stomach, who are apparently in other respects, in good health; but this unpleasant complaint, is more especially an attendant on the dyspepsy or indigestion; it is often met with in other complaints. Whenever sourness or acidity of the stomach exists, it will be proper to use some antacid to correct the acidity; and it is then generally profitable to use some tonic for the purpose of increasing the tone of the digestive organs.

NEUTRALIZING DRINK.

Take of,	
Ashes of good, sound wood,	8 table-spoonsful,
Chalk,	1 table-spoonful,
Boiling water,	1 pint.

Pour the boiling water on the ashes and chalk, and immediately cover the vessel with something to exclude the air. This precaution will deprive the ley, of that sharp, biting taste it always acquires when left uncovered or exposed to the atmosphere. This preparation may be taken in doses of about a half a gill, more or less;

as the case may require; and is valuable in most cases of acidity, but will be found especially useful, when taking an emetic, if the stomach be sour.

ABSORBENT, AND APERIENT MIXTURE.

Take of,

Chalk prepared,	2 table-spoonsful,
Gum Arabic powdered,	1 table-spoonful,
Rhubarb powdered,	2 tea-spoonsful,
Loaf-sugar,	3 table-spoonsful,
Water,	1 tea-cupful.

This mixture not only corrects the acidity of the stomach, but is moderately aperient, and thus carries off the offensive matter from the system. Dose for adults, a table-spoonful, every two or three hours.

From the American practice, we transcribe the following valuable recipe:

NEUTRALIZING MIXTURE, OR PHYSIC,

Take of,

Rhubarb pulverized,	2 scruples,
Salteratus, do.	2 "
Peppermint plant, do.	2 "
Boiling water,	a half pint,
Brandy,	1 table-spoonful,
Sweeten with loaf-sugar.	

This is a most valuable preparation for cholera morbus, cholera infantum, or summer complaint among children, &c. "Its operation and action appear to be a specific, or almost infallible". Dose for adults, a table-spoonful;—for children, a tea-spoonful, every hour.

NEUTRALIZING SIRUP.

Take of,	
Rhubarb pulverized,	2 oz.
Salæratus, do.	2 oz.
Golden seal, do.	1 oz.
Garden rue, do.	1 oz.
Lady's slipper, do.	1 oz.
Peppermint plant, do.	1 oz.
Loaf sugar,	1 $\frac{1}{2}$ lbs.

Add five quarts boiling water,—simmer down to four,—when settled pour off, after which, add the whites of six eggs, well beaten—then put it to a gentle boil, skimming off the foam;—then settle, and strain, after which, add one pint diaphoretic tincture, and $1 \frac{1}{2}$ oz. oil of peppermint, and bottle for use.

Use.—This is a valuable family medicine; and I have used it with success for acidity or sourness of the stomach; and for such complaints as proceed from a sour stomach, as *cadieri morbus*, *cholera infantum*, dysentery, colic, sickness of the stomach, &c. Dose, for adults, from one to two table-spoonsful.

ANODYNES.

THESE are medicines that relieve pain and procure sleep. The articles useful for this purpose are,

Decoction of colic root;—tea of rattle weed;—decoction of the Indian anodyne root;—tincture of camphor. These articles may be used alone, or combined with others, of like properties. See these articles under their respective heads in *materia medica*.

ANODYNE POWDERS.

Take of,	
Witch hazel leaves dry,	6 oz.
Sumach leaves do.	4 oz.

Lady's Slipper root,	8 oz.
Ginger root pared,	6 oz.
Cinnamon bark,	3 oz.
Sweet Fennel seed,	2 oz.
African Cayenne,	1 oz.
Cloves,	1 oz.

All finely pulverized, sifted, and well mixed.

These powders are valuable for menstrual derangements, for bearing down pains, and for affections of the kidneys, bladder, and womb; and especially during pregnancy, and in labor, they are a most excellent corrector, promoter, and alleviator.

Dose, a half gill of the warm decoction, made by pouring a half pint of boiling water on a table-spoonful of the powder, and simmering slowly in a tin vessel ten or twelve minutes. This dose may be repeated every twenty or thirty minutes if the urgency of the symptoms demand it, until relief be obtained.

ANOTHER FORMULA.

Take of,	
Red Raspberry leaves,	4 oz.
Indian Anodyne root,	4 oz.
Valerian root,	4 oz.
Sars Root,	4 oz.
Anise seed,	4 oz.
Colic root,	4 oz.
Rattle-weed root,	4 oz.
Peppermint plant,	4 oz.
Cayenne,	1 oz.
Cloves,	1 oz.

All finely pulverized as above--dose, and use the same.

ANODYNE TINCTURE.

Take of,	
Diaphoretic tincture,	1 pint,
Tincture of Lady's Slipper,	1 do.

Colic drops,	1 pint,
Essence of Anise,	$\frac{1}{2}$ do.
Essence of Peppermint,	$\frac{1}{2}$ do.
Mix, and shake well together.	

This tincture is good for pains of every description, particularly in the stomach, bowels, or head; also for cholera morbus, diarrhea, dysentery, &c. Dose, from one to three tea-spoonsful, repeated every fifteen minutes until relief be obtained.

Under their proper heads, the reader will find the method of preparing the several ingredients, which form the above compound.

ANTHELMINTICS OR VERMIFUGES.

THESE are medicines employed to destroy or expel worms. The most valuable simple articles are, male or sweet fern, butter-nut sirup, Carolina pink root, China tree, winterberry, wild cherry, cowhage, asafetida, Jerusalem oak; all of which you can find described under their proper heads, in *materia medica*, together with the method of administering, and the quantity for a dose.

WORM POWDERS,

Take of,	
Poplar bark of the root,	4 oz.
Bitter root,	4 oz.
Wild cherry bark of the root,	4 oz..
Black Alder bark of the root,	4 oz.
Cedar berries,	4 oz.

Pulverize all the ingredients and mix them well together. Dose, one tea-spoonful taken in molasses or honey, three times a day for three days in succession, on an empty stomach. Useful for worms.

ANOTHER FORMULA.

Take of,	
Yellow Gentian root,	2 oz.
Peach tree, inner bark of the root,	2 oz.
Spearmint plant,	2 oz.
Skunk cabbage balls,	2 oz.
Indian hemp root,	2 oz.

Pulverize, and mix all the articles together. Dose, the same as the above;—use the same.

WORM DROPS.

Take of,	
Diaphoretic tincture,	1 gill,
Tincture of aloes,	1 "

Mix together, and it is ready for use. Dose, one tea-spoonful, repeated as often as the case requires, at least three times a day.

ANTHELMINTIC TINCTURE.

Take of,	
Wild cherry bark of the root,	1 oz.
Poplar bark of the root,	1 oz.
Dog-wood bark of the root,	1 oz.
Bitter root,	1 oz.
Cedar berries,	1 oz.
Alcohol,	1 quart.

Pulverize all the solid articles, and put them in the alcohol,—digest seven days in a sun heat, shaking it well once or twice a day. Dose, from a tea-spoonful to a table-spoonful, three times a day. Good to destroy worms.

VERMIFUGE OIL.

Take of,	
Castor oil,	4 oz.
Anise oil,	$\frac{1}{2}$ oz.
Worm seed oil,	$\frac{1}{2}$ oz.
Oil of Hemlock,	1 oz.

Mix, and shake them well together; repeat the shaking every time it is used. Dose, for an adult a tea-spoonful, three times a day, giving a purge of butter-nut syrup every other day.

ANTI-EMETICS.

ANTIEMETICS are medicines employed to allay the irritation of the stomach and check vomiting. Medicines of this kind may be used in all cases of spontaneous vomiting, and where an emetic is likely to operate too long; for if not checked it will exhaust the strength of the patient, and prostrate the powers of the living machine. When spontaneous vomiting proceeds from a foul stomach, you must not undertake to stop it until you have first cleansed the stomach with an emetic.

ANTI-EMETIC INFUSION.

Take of,	
Wild Hoarhound plant,	1 oz.
Peppermint,	1 oz.
Spearmint,	1 oz.

Bruise the plants well, and then steep them thirty minutes in a pint of cold water; after which, press out the infusion, and add a gill of good vinegar, when it will be ready for use. Dose, a half gill, repeated every fifteen or twenty minutes.

ANTI-EMETIC DROPS.

Take of,	
Good vinegar,	1 pint,
Oil of Peppermint,	$\frac{1}{4}$ oz.
Cayenne pepper,	$\frac{1}{2}$ oz.
Table-salt,	2 oz.

Mix, and bottle for use: Dose, from a half to a table-spoonful every fifteen or twenty minutes, until vomiting is checked.

TINCTURE OF SPEARMINT.

Take of,	
Spearmint, fresh plant bruised,	3 oz.
Toaf sugar,	4 oz.
French brandy	1 pint.

Shake it well and let it digest some time:—Dose, from a half to a whole table-spoonful, repeated every fifteen or twenty minutes until vomiting cease.

AROMATIC ANTI-EMETIC TINCTURE.

Take of,	
Anise seeds,	4 oz.
Cinnamon bark,	2 oz.
Ginger root pared,	2 oz.
Sassafras bark of the root,	2 oz.
Peppermint plant,	2 oz.
Ginseng root,	4 oz.
Lady's Slipper,	$1\frac{1}{2}$ lbs.
Alcohol,	4 quarts.

Pulverize all the solid articles, and put them in the alcohol:—digest seven days in hot sun heat, shaking it well two or three times a day. Dose, from one to three tea-spoonsful, repeated every fifteen or twenty minutes,

until vomiting is checked. This preparation is good to stop vomiting where it is attended with spasms in the stomach.

MINT TEA.

Take of,	
Spearmint,	1 oz.
Hot water,	1 pint.

Infuse fifteen minutes, and strain out the tea. Dose, one table-spoonful for a child a year old, give more or less, as it is older or younger. This tea is excellent to relieve nausea or retching to vomit, when produced by worms.

MINT FOMENTATION.

Take of fresh peppermint, any convenient quantity, and stew it in spirits;—apply it as a poultice to the pit of the stomach, warm as can be borne. This frequently has succeeded in checking vomiting, when there was such irritability of the stomach that the usual remedies failed.
—A. Pr.

ANTISPASMODICS.

MEDICINES of this class are used to relieve spasms or cramps:—Nervines act on the same principle, though less powerful; we shall therefore give both in the same class. For simple articles of this class, see antispasmodics in *materia medica*.

ANTISPASMODIC TINCTURE.

Take of,	
Tincture of blue Cohosh,	$\frac{1}{2}$ pint,
Tincture of Cayenne,	1 “

Tincture of Lobelia seeds,	1 pint,
Tincture of Lady's Slipper,	1 "

Shake all well together, and bottle for use. Dose, from half a tea-spoonful to a table-spoonful, repeated every five or ten minutes as often as circumstances require. This tincture is a most valuable remedy for fits, spasms, and the like. It may also be used in all violent attacks of disease, and in cases of suspended animation, whether from drowning, hanging, or any other cause. In cases of the accidental or intentional introduction of poisonous substances into the stomach, this tincture should be used as an emetic, as it will not only prevent the poison from cramping the stomach, or any other part of the system, so as to produce dangerous consequences, but will also operate as a speedy emetic. The simple tinctures of which this is composed, ought to be made as strong as the different articles will make them.

ANOTHER FORMULA.

Take of,	
Cayenne pepper,	2 oz.
Lobelia seeds,	2 oz.
Lady's Slipper,	2 oz.
Diaphoretic tincture,	1 quart.

Pulverize all the solid articles, then add them to the diaphoretic tincture, and let them digest eight or ten days in a sun heat, shaking it well once or twice a day. This tincture may be administered in the same way as the one above, and is useful for the same purposes.

COMPOUND ANTISPASMODIC TINCTURE.

Take of,	
Lady's Slipper root,	1 lb.
Scull-cap plant,	8 oz.
Fit-root plant,	8 oz.

Anise seeds,	8 oz.
White Ginger,	8 oz.
Sassafras bark of the root,	4 oz.
Cinnamon bark,	4 oz.
Skunk Cabbage root,	4 oz.
Ginseng root,	4 oz.
Cayenne pepper,	2 oz.
Alcohol,	6 quarts.

Pulverize all the solid ingredients, and then digest them in the alcohol ten days in a sun heat, shaking it well two or three times a day; then filter through brown paper. Dose, from one to three tea-spoonsful; Useful in spasmotic and nervous affections. This last is not so well adapted to violent cases, as the two that go before.

The following articles in this class are usually termed nervines, and are useful to allay nervous irritation in all ordinary cases; but in violent cases the antispasmodics should be used.

One of the best nerve powders is the Yellow Lady's Slipper, in doses of a half or whole tea-spoonful in warm water.

NERVINE POWDERS.

Take of,	
Blue Cohosh,	4 oz.
Nutmeg,	2 oz.
Ginseng,	2 oz.
Yellow Lady's Slipper,	8 oz.

Pulverize all the ingredients, and mix them well together. Dose, a tea-spoonful in warm water.

NERVINE TINCTURE.

Take of,	
Nervine powders,	4 oz.
Alcohol,	1 pint.

Digest seven days in a sun heat, shaking it well two or three times a day; then pour off the tincture, either straining or filtering it. Dose, from one to three tea-spoonsful, repeated every ten or fifteen minutes until relief is obtained.

COMPOUND NERVINE TINCTURE.

Take of,	
Lady's Slipper root,	6 oz.
Sassafras bark of the root,	4 oz.
Liquorice root,	4 oz.
Gum Camphor,	$\frac{1}{4}$ oz.
Oil of Anise,	1 oz.
Mountain Dittany,	4 oz.
Alcohol,	3 pints.

Pulverize all the solid ingredients, and digest eight or ten days in a sun heat, shaking it well every day. Dose; from one to three tea-spoonsful, repeated every fifteen minutes, until relieved. This tincture is highly valuable to relieve pains, colics, &c.; and very valuable for children.

NERVE POWDERS.

Take of,	
Lady's Slipper root,	4 oz.
Cayenne,	$\frac{1}{2}$ oz.

Pulverize, and mix well together:—Dose, one tea-spoonful in warm water. This preparation is perhaps one of the best nervines for common use.

TINCTURE OF LADY'S SLIPPER.

Take of,	
Lady's Slipper root,	4 oz.
Alcohol,	1 pint,
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Pulverize the root, and digest in the alcohol, ten days in a sun heat, shaking it every day; then strain or filter, and bottle for use. Dose, from a tea-spoonful to a table-spoonful, repeated at discretion, as often as circumstances require. This tincture is a most excellent remedy for all ordinary cases of nervous affections; and is rarely administered in such cases without producing the desired effect.

ANTI-SEPTICS.

MEDICINES of this class are used to prevent, or to stop mortification, after it has commenced. Antiseptics both include, and operate as stimulants and tonics, and produce their happy effect by restoring tone and action to the diseased organs. They may be used both internally and externally at the same time, in all cases where the mortified part is so situated as to admit of external applications. This double use of remedies is a most valuable improvement in the practice of the healing art, which was scarcely known, and seldom pursued, previous to the introduction of the botanic practice. This mode of practice, connected with the superior antiseptic virtues of the botanic remedies, has secured a success among the botanic practitioners, in the treatment of mortifying sores, and ulcers, that was previously unknown in the annals of medicine. The simple articles which we recommend the reader can find in the class of antiseptics in *materia medica*, with a description of the method of preparing and using them.—[See page 138.]

ANTISEPTIC TINCTURE.

Take of,	
Gum Myrrh,	1 lb.
Gum Camphor,	1 oz.
Balsam of Fir,	2 oz.

Cayenne pepper,	1 oz.
Oil of Sassafras,	2 oz.
Nutmeg,	2 oz.
French brandy,	1 gallon.

Pulverize the solid articles very fine, then add the brandy, putting all into a stone jug.—Set the jug into a kettle of water, and let it boil from five to ten minutes, leaving the jug open, and stirring its contents. This done, digest six or eight days in a hot sun heat, shaking it once or twice a day:—strain or filter, and bottle up for use. This tincture is a most powerful antiseptic, and is a very valuable wash to cleanse old, foul ulcers, and dispose them to heal. Dose internally from a tea-spoonful to a table-spoonful. This is a most excellent family medicine, useful for dysentery, mortification, &c.; also for pains in the stomach, colic, head-ache, worms, &c.—seldom comes amiss in any complaint.

The drugs of the antiseptic tincture, used as a poultice, and kept moist with the tincture, or with bathing drops, is most excellent for pains, bruises, strains, and the like; and also for the white swelling in its first rising, I have found it a most efficient remedy; and when applied in time it has never failed in my hands to put it back, and prevent its rising.

ANTISEPTIC INFUSION.

Take of,	
White Sumach, bark of the root,	4 oz.
Sassafras, bark of the root,	4 oz.
Slippery Elm, inner bark,	4 oz.

Pulverize all the ingredients, and mix them well together. Infuse one ounce of these powders in a pint of hot water; then add one table-spoonful of the antiseptic tincture. This is also a good antiseptic wash, although not so powerful as the one above; for inflammation of

bowels, it is a good remedy, administered by injection. Dose internally, a half tea-cupful or more, repeated as circumstances require.

ANTISEPTIC DECOCTION.

Take of,	
Red-root,	1 oz.
Solomon's Seal root,	2 oz.
Sweet milk,	1 quart.

Pulverize the solid articles, then add the milk, and simmer down to three half pints. This decoction administered in doses of a gill, repeated every twenty or thirty minutes, is an excellent remedy for inflammation of the bowels, giving at the same time an injection of it, repeated in thirty minutes, if the obstinacy of the case require it. In the hands of the Indian doctor Mitchel, it proved a most efficient remedy for the flux, checking the violence of the symptoms, in the worst cases of even the bloody flux, in a few minutes, and effecting a perfect cure in a few days.

ANTISEPTIC ANTI-EMETIC.

Take of,	
Charcoal prepared,	2 oz.
Vinegar best quality,	1 pint.

Pulverize the charcoal fine as possible, then add the vinegar. This preparation is valuable for inflammation of the stomach, and to check vomiting produced by an inflammation of that organ. Dose from one to four table-spoonsful, repeated as often as the case may require:—always shake it up before using.

ASTRINGENT TONICS.

MEDICINES of this class are indispensable in the practice of the healing art. They are of very general use, there being but few cases in which they may not be profitably used. In obstinate costiveness, and in ardent fevers attended with constant dryness of the mouth, particularly if the dryness be increased by their use, this class of remedies must not be employed. In such cases employ the laxative bitter tonics, and cayenne, or some sialagogic to restore the proper moisture to the mouth. Astringent tonics have a powerful influence over the system; and their free use in the recovery from disease, has great tendency to prevent relapses.

Compounds of this class are peculiarly adapted to the treatment of dysentery, diarrhea, and all looseness of the bowels; also flooding, and hemorrhages of every description; likewise ulcers, canker, and all relaxed states of the system.

The simple articles belonging to this class, are bayberry, beth root, black birch, cinnamon, cohosh, dewberry, dogwood, evan root, blackberry, red raspberry, witch hazel, sumach, pond lilly, &c. all of which you can find in *materia medica*, with a description of the method of administering, and the quantity for a dose.

ASTRINGENT TONIC POWDERS.

Take of,

Bayberry, bark of the root,	4 oz.
Hemlock, inner bark,	4 oz.
Birth root,	4 oz.
Sumach. bark of the root,	4 oz.
Dewberry root,	4 oz.

Pulverize all the articles finely, and mix them well together. Of this powder, infuse one ounce in three half pints of hot water; and of this infusion, the dose is a

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gill with from half to a whole tea-spoonful of cayenne added. In ordinary cases, this dose repeated three times a day will answer; but in flooding, dysentery, flux, &c. it should be repeated every hour or two, as the violence of the symptoms may require.

ANOTHER FORMULA.

Take of,	
Witch hazel,	8 oz.
Red raspberry,	8 oz.
Persimmon, inner bark,	8 oz.
Evan root,	8 oz.
Sumach leaves,	8 oz.

Reduce all the articles to a fine powder, and mix them well together. Prepare, and use this in the same way, as the one above described.

ANOTHER FORMULA.

Take of,	
White oak, inner bark,	6 oz.
Beech drops root,	4 oz.
Hickory, inner bark,	4 oz.
Blackberry root,	3 oz.
Dog-wood, inner bark,	3 oz.

Reduce all the articles to a fine powder, and mix them thoroughly. This preparation is very astringent, and is useful in violent cases where astringent tonics are required. It may be prepared, and administered in the same manner that the two foregoing are.

ASTRINGENT TONIC CORDIAL.

Take of,	
Wild cherry, bark of the root,	4 oz.
Blackberry, bark of the root,	4 oz.
Yellow poplar, bark of the root,	4 oz.

Gathered fresh and bruised, then add enough water to make a strong tea: strain off and for each quart of the tea, add one pound of loaf sugar, and one fourth of an ounce of nutmeg finely pulverized, and one gill of anise officinalis tincture. Dose, a half a wine-glassful three or four times a day, or oftener if the violence of the symptoms require it. This cordial is useful for bowel complaints, such as dysentery, diarrhoea, &c.; but its astringent quality is so powerful as to require some caution in using it. Recollect that in all bowel complaints, you must first give a purge or an injection, to carry off the acrid irritating matter from the bowels, before any astringent is given.

ANTIDYSENTERIC DECOCTION.

Take of,	
A willow root,	4 oz.
Wild cherry, bark of the root,	4 oz.
Dwarfberry root,	2 oz.

Pulverize all the ingredients; and add one gallon of water; boil down to three quarts, then strain, and add three gills of French brandy, or if it cannot be had, same quantity of proof spirits. Dose, a half a gill three or four times a day. Use.—The same as the foregoing articles.

SIRUP FOR DYSENTERY.

Take of rhubarb and wild cherry bark, a handful, and add four table spoonsful of sugar; simmer a while. Dose, a table-spoonful every fifteen minutes until the pain ceases. Make it fresh every day and add a little brandy.

A work, entitled the "Indian Physician," from which this is taken, pronounces it an infallible remedy for the dysentery, saying that it has never failed in thirty years trial.

From the "American Practice," we extract the following valuable recipe, which has great reputation for its efficacy in curing bowel complaints.

BLACKBERRY SIRUP.

Take of blackberry, bark of the root, cleaned or washed; add a suitable quantity of water, then boil two hours. Pour off the liquid, and add more water; and thus continue to boil and pour off, until all the strength is extracted; then strain, adding all the boilings together. Simmer down to two quarts; strain again, then add four pounds loaf sugar, and when cool, add half a pint of best French brandy.

Dose, a tablespoonful three times a day fasting. If this does not arrest the disease in a day or two, gradually increase the dose, as the stomach can bear it. This sirup is very valuable for all bowel complaints, but particularly those of the chronic form; and has in some instances effected cures, when every other means had failed. It appears to possess specific virtues, different from every other vegetable.

ASTRINGENT TONIC SIRUP.

Take of,	
Witch hazel leaves,	4 oz.
Golden seal root,	4 oz.
White sumach,	4 oz.
Red raspberry leaves,	4 oz.

Pulverize all the articles, then add one gallon of water, and boil down to two quarts; strain off the decoction, and add three pounds of loaf sugar; then simmer until all the sugar is dissolved, after which add a half pint of the antiseptic tincture, heretofore described, and bottle up for use. Dose, a half a gill, three or four times a day. This is an excellent medicine for dysentery,

diarrhea, &c., particularly good for these complaints among children.

BITTER TONICS.

MEDICINES of this class are generally employed for the purpose of assisting the organs in recovering a healthy, vigorous tone, and enabling the living power to exercise a proper influence over them. They are therefore very properly resorted to after the force of the disease is overcome by other remedies; because their peculiar, beneficial effect upon the system is that of a restorative. Experience has taught, however, that the beneficial results of this class of medicines is, in most cases increased, by combining with them a portion of some astringent tonic.

The simple articles of this class are very numerous. Some of the best and most common only, will we mention at this place. They are, balmony, bitter root, barberry, bitter sweet, black root, boneset, columbo root, golden seal, gum myrrh, poplar bark, rich weed, samson snake root, spikenard, hoarhound, yellow parilla. All of them may be found under their proper heads in *materia medica*, with a description of the method of preparing and using them.

BITTER TONIC POWDERS.

Take of,	
Golden seal root,	8 oz.
Columbo root,	8 oz.
Barberry, bark of the root,	8 oz.
Poplar bark,	8 oz.
Sumach, bark of the root,	8 oz.
Hemlock bark,	8 oz.
Prickly ash bark,	4 oz.
Cloves,	2 oz.
Cayenne pepper,	2 oz.
Loaf sugar,	4 lb.

All the articles must be finely pulverized, sifted or bolted, and well mixed together. Dose, one tea-spoonful, either in hot or cold water, repeated two or three times a day.

ANOTHER FORMULA.

Take of,	
Balmony leaves,	8 oz.
Caraway seeds,	8 oz.
Black birch bark,	8 oz.
Quiver-leaf bark,	6 oz.
Gentian, bark of the root,	4 oz.
Pipsisewa,	4 oz.
Cinnamon bark,	4 oz.
Cloves,	2 oz.
Capsicum,	2 oz.
Loaf sugar,	3 lbs.

This compound is to be prepared, and administered in the same way, that the foregoing one is.

ANOTHER FORMULA.

Take of,	
Barberry, bark of the root,	12 oz.
Golden seal,	8 oz.
Poplar bark.	8 oz.
African cayenne,	1 oz.
Cloves,	1 oz.
Loaf sugar,	2 lbs.

To be prepared, and used as the foregoing.

ANOTHER FORMULA.

Take of,	
Tansey,	4 oz.
Centaury,	4 oz.
Wild hoarhound,	4 oz.
Garden rue,	4 oz.
Balmony,	4 oz.
Cayenne,	1 oz.

Cinnamon bark,	2 oz.
Loaf sugar,	1 $\frac{1}{2}$ lbs.
Prepared, and used as the foregoing.	

WINE BITTERS.

Take of, either of the above compounds three ounces, and put them into a quart of wine. Dose, from one to two table-spoonsful, three or four times a day. These bitters are valuable for persons laboring under debility, and for feeble digestive powers.

ANOTHER FORMULA.

Take of,	
Golden seal,	1 oz.
White wood bark,	1 oz.
Bitter root,	1 oz.
Cayenne pepper,	$\frac{1}{2}$ oz.

Pulverize all the solid ingredients, and add two quarts of wine. Dose, from a table-spoonful to a wine-glassful, three times a day. Useful in all cases where bitter tonics are indicated.—“*American Practice.*”

HOT BITTERS.

Take of,	
Poplar bark,	8 oz.
Hemlock bark,	6 oz.
Bayberry, bark of the root,	4 oz.
Golden seal,	8 oz.
Columbo root,	4 oz.
Prickly ash bark,	4 oz.
Blue flag root,	4 oz.
Capsicum,	6 oz.
Cloves,	6 oz.
Loaf sugar,	3 lbs.

Finely pulverize all the ingredients, and mix them well together. Of this compound take two ounces, and of brown sugar the same; put them in a quart of French brandy or proof spirits;—digest three or four days, shaking it several times a day, when it will be fit for use. Dose, two tea-spoonsful in a gill of hot water sweetened. This preparation removes colds, improves the appetite, quenches thirst, relieves cough, and cures colic.

ANTIDYSPEPTIC TONIC POWDERS.

Take of,

Hemlock bark,	4 oz.
Golden seal,	8 oz.
Samson snake root,	6 oz.
Bayberry, bark of the root,	4 oz.
Poplar bark,	4 oz.
Columbo root,	6 oz.
Black root,	12 oz.
Capsicum,	1 oz.
Cloves,	1 oz.
Loaf sugar,	3 lbs.

Finely pulverize all the ingredients, sift or bolt, and mix all well together. Dose, a large tea-spoonful in hot water, three or four times a day. Perhaps a better method, is to take one ounce of the powder, and to it, add three gills of gin or Lisbon wine, one gill of water, and two ounces of loaf sugar;—bottle up for use shaking every time before using. This preparation is good for dyspepsy, liver complaints, and the like; operating also as a gentle aperient.

LAXATIVE BITTER TONIC.

Take of,

Bayberry root,	4 oz.
Golden seal,	4 oz.
Poplar bark,	4 oz.

Bitter root,	4 oz.
Cayenne,	1 oz.
Cloves,	1 oz.
Loaf sugar,	1 lb.

Pulverize all the ingredients finely, sift or bolt, and mix them well together. Dose, a tea-spoonful in a gill of hot water, three or four times a day. The medical virtues of this compound are much the same as the one above, except its aperient or laxative powers are a little stronger.

RESTORATIVE TONIC CORDIAL.

Take of,	
Bayberry root,	8 oz.
Golden seal root,	6 oz.
Lady's slipper,	6 oz.
Peach kernels,	4 oz.

Pulverize all the articles well, then add two gallons of water, and boil down to one; then strain, and add four pounds loaf sugar, and two quarts of French or peach brandy, when it may be bottled up for use. Dose, a half a gill three times a day.

This compound is a most excellent restorative, useful in all cases of debility, and for patients recovering from fevers or other complaints that have induced debility: it is also good in dysentery and diarrhea.

TONIC SIRUP.

Take of,	
Rattle root,	4 oz.
Prickly ash berries,	4 oz.
Spikenard root,	4 oz.
Hoarhound plant,	4 oz.
Bayberry root,	6 oz.
Golden seal,	6 oz.

Poplar bark,	8 oz.
Bitter root,	8 oz.
Lady's slipper,	8 oz.
Skuak cabbage root,	4 oz.
Peach kernels,	3 oz.
Capsicum	1 oz.

Pulverize all the ingredients, add three gallons of water, and boil down to six quarts; then strain off, and add four quarts of good honey, two quarts of French brandy, and bottle up for use. Dose, from one to four table-spoonsful three or four times a day. This syrup is valuable for coughs, consumptions, and all complaints of the breast, attended with debility.

ANTIDYSPEPTIC SIRUP.

Take of,

Golden seal,	8 oz.
Bayberry, bark of the root,	8 oz.
Poplar bark,	8 oz.
Wild cherry bark,	8 oz.
Bitter root,	8 oz.
Spikenard,	8 oz.
Star root,	8 oz.
Lady's slipper,	8 oz.
Black root,	8 oz.
Seneka snake root,	8 oz.
Hoarhound,	8 oz.
Hemlock bark,	8 oz.
Elecampagne,	8 oz.

Pulverize all the ingredients, and then boil them in six gallons of water down to three; strain off the decoction and add two gallons of honey; four ounces of pearl-ash, and the whites of a dozen eggs well beaten together; then put it to a gentle boil, skimming off the foam as it rises; strain or filter, and then add one gallon of the antiseptic tincture. Dose, from one to two table-spoonsful three times a day. Good for the dyspepsy.

BATHING DROPS.

Treatment for stimulating washes, applied to painful parts, tumors, swellings, &c., to aid in removing local obstruction, by stimulating the languid or inactive organs into action. They should, whenever the case will admit, be applied with friction or rubbing.

BATHING DROPS.

Take of,	
Diaphoretic tincture,	1 quart.
Gum camphor,	1 oz.
Oil of Hemlock,	1 oz.

Dissolve the camphor in the tincture, and then add the oil, and it is ready for use. Useful for bruises, sprains, pains, rheumatism, and the like.

ANOTHER FORMULA.

Take of,	
Gum myrrh,	4 oz.
Capsicum,	2 oz.
Balm of Gilead buds,	2 oz.
Oil of sassafras,	2 oz.
Alcohol,	2 quarts.

Pulverize the solid articles; then add the oil and alcohol;—digest ten days in a hot sun heat, shaking it two or three times every day.

ANOTHER FORMULA.

Take of,	
Antispasmodic tincture,	1 pint,
Oil of Hemlock,	1 oz.
Oil of cedar,	1 oz.
Gum camphor,	1 oz.

Mix, and shake well before using. These drops are

perhaps better for common use than either of the foregoing, as they are not so apt to fill up the pores of the skin, when it is rubbed on; this is also good for tetter-worm.

ANTISEPTIC BATHING DROPS.

Take of,

Antiseptic tincture,	1 pint,
Oil of sassafras,	1 oz.
Oil of fir,	1 oz.
Gum camphor,	1 oz.

Mix and bottle for use, shaking every time before using. These drops are valuable to prevent mortification; also good for bruises, inflammations, spasms, swelled joints, &c.

RHEUMATIC BATHING DROPS.

Take of,

African cayenne, best quality,	4 oz.
Alcohol,	1 quart.

Simmer down to a pint, in a tin vessel and add,

Oil of hemlock,	1 oz.
Oil of cedar,	1 oz.
Oil of golden rod,	1 oz.

Shake up before using. These drops are very powerful, and are used only in obstinate cases. Useful for rheumatic pains, and indurated swellings, &c.

CATHARTICS.

CATHARTICS, although necessary, and useful in the treatment of some diseases, require some caution in their use, as their indiscriminate use, has been attended with pernicious consequences. Within the last few years

their pernicious effects have become more apparent, and more generally acknowledged by distinguished physicians than at any former period. There are not many cases where any thing more active than the laxative bitter tonic is needed; but when cathartics are indicated, the mildest preparations that will answer ought to be used, as there is no other indication in the treatment of disease, whose fulfilment, has as great a tendency to prostrate the system, and impair the energy of the living power.

For the simple articles of this class, see “*cathartics*” in *materia medica*, where you will find them described, with the method of preparing and using them.

REED'S ANTIBILIOUS PILLS.

Take of,	
Gamboge,	2 oz.
Blood root,	2 oz.
Lobelia seeds,	1 oz.
Cayenne,	2 drachms,
Rhubarb,	4 drachms,
Pearlash,	1 drachm.

“All made fine, sifted, and mixed. Bring to a proper consistence for making into pills, by adding sirup, of buck thorn or butter-nut. After making, roll them in pulverized golden seal.”

Dr. Reed says, “These pills may be used either as a puke or a purge. Take one every hour till they purge; take four at a time, and they will puke, sweat, and produce a free discharge of urine.”

CATHARTIC PILLS.

Take of,	
Black root,	6 oz.
Blood root,	4 oz.
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Bitter root,	4 oz.
Lobelia seeds,	2 oz.
Gamboge,	4 oz.
Cayenne,	1 oz.

Pulverize all the ingredients finely, sift or bolt, and mix them well together. Bring them to a proper consistency to form into pills, by adding molasses. When made into pills, roll them in finely pulverized bayberry. Dose, from three to five.

ANOTHER FORMULA.

Take of,	
Aloes,	4 oz.
Blood root,	4 oz.
Gamboge,	4 oz.
Lobelia seeds,	2 oz.
Capsicum,	$\frac{1}{2}$ oz.

Prepared, and used in the same way, as the foregoing.

HULL'S BILIOUS PHYSIC.

Take of,	
Aloes,	8 oz.
Mace	1 oz.
Myrrh,	1 oz.
Cinnamon,	1 oz.
Cloves,	1 oz.
Saffron,	1 oz.
Ginger,	1 oz.
Garden sun-flower,	4 oz.

Pulverize all the articles separately, and then mix them together. Dose, a table-spoonful in warm water. This compound has acquired considerable celebrity for its efficacy in curing the bilious colic.

HEPATIC PILLS.

Take equal portions of the inner bark of butter-nut and common elder; boil them in a suitable quantity of water until all the strength is extracted; strain off, and boil down to the consistence of molasses, taking care not to burn or scorch it; then add enough of black root, and hepatic aloes, in equal portions, with a small portion of cayenne to make it a proper consistence to make into pills. Dose, from two to five;—Useful for complaints of the liver.

BUTTERNUT SIRUP..

Take any desired quantity of the fresh bruised inner bark of the butternut, and boil it fifteen minutes in a suitable quantity of water; then pour off the decoction, and add a fresh portion of water and boil again;—pour off and add the two boilings together. For each gallon of the decoction add the whites of six eggs well beaten; put it to boil again, carefully skimming off, and pour it into a tin vessel, and put the vessel in a kettle of water, and boil it down to the consistence of molasses; add to each gallon two quarts of molasses, and one quart of diaphoretic tincture; then bottle up for use. Dose, from one to two table-spoonsful;—useful in most cases where cathartics are indicated.

CATHARTIC TINCTURE.

Take of,	
Bitter root,	4 oz.
Flower de luce, green root.	2 oz.
Proof spirits,	1 quart..

Pulverize the solid articles, and add the spirits;—digest six or eight days. Dose, from one to two table-spoonsful. Useful to prevent puking, and operate on

the bowels, in what is called the milk sick; also valuable for the ague.

BUNNELL'S ANTIBILIOUS PILLS.

Take of,	
Mandrake root,	8 oz.
Gamboge,	8 oz.
Blood root,	4 oz.
Lobelia seeds,	4 oz.

Pulverize all the articles finely, sift or bolt, and mix them thoroughly. Bring the powders to a proper consistence to form pills by adding molasses. Dose, from two to five.

These pills are useful in diarrhea, dysentery, rheumatism, jaundice, female obstructions, &c. For chronic complaints the dose should be increased so as to operate as a brisk purge, about once every third day, and on the intermediate days two a day will be enough; but if purging the patient weakens him much it is an indication that you should not repeat the purge.

PURGATIVE SIRUP.

Take of,	
White walnut, inner bark of the root,	2 lbs.
Common elder, bark of the root,	1 lb.
Dog-wood, bark of the root,	1 lb.

Boil all these together in water, until the strength is extracted; strain the decoction, and put it into a tin vessel, which you must set in a kettle of water, and boil it down to the consistence of molasses; then for each quart add a half pint of molasses, and a half pint of the diaphoretic tincture: bottle up for use. Dose, from one to two table-spoonsful. This is a very active purge; and must be used with some caution. It generally gives immediate relief to cramp, bilious colics, and for worms, particularly for the tape worm, it is good.

CARMINATIVES.

MEDICINES of this class are employed to expel wind from the stomach, and give relief in flatulent colics. The simple articles recommended, and used for this purpose, are, colic root, rich weed, asafetida, blue cohosh, star root, white ginger, chamomile, evan root, catnip, oil of peppermint, oil of spicebush berries, oil of cinnamon.

CARMINATIVE TINCTURE.

Take of,	
Colic root,	2 oz.
White ginger,	2 oz.
Blue cohosh,	2 oz.
Lady's slipper,	2 oz.
Star root,	2 oz.
Cloves,	1 oz.
Oil of peppermint,	2 dr'ems,
Alcohol,	1 quart.

Reduce all the solid ingredients to a fine powder, then add the oil and alcohol: digest ten days in a hot sun heat, shaking two or three times every day; then strain or filter, and bottle up for use. Dose, from half to a whole table-spoonful, on sugar. This tincture is valuable for flatulent colics, pains in the stomach or bowels.

CARMINATIVE DECOCTION.

Take of,	
Peppermint plant,	4 oz.
Chamomile plant,	4 oz.
May weed plant,	4 oz.
Columbo root,	4 oz.
Pennyroyal plant,	4 oz.
Catnip plant,	4 oz.
Lady's slipper root,	4 oz.

Evan root,	4 oz.
Rich weed,	4 oz.

Pulverize all the ingredients, and pat them into two gallons of water; boil down to three quarts;—then strain out the decoction, and add one quart of diaphoretic tincture. Dose, from a tea-spoonful to a table-spoonful, repeated as circumstances may require until relief be obtained. This decoction is good for flatulent colics, pains in the stomach, and bowels.

COLIC DROPS.

Take of,	
White ginger,	2 oz.
Cinnamon,	2 oz.
Cloves,	2 oz.
Colic root,	2 oz.
Star root,	2 oz.
Gum camphor,	1 oz.
Oil of peppermint,	$\frac{1}{2}$ oz.
Oil of lavender,	$\frac{1}{2}$ oz.
Alcohol,	3 pints.

Finely pulverize all the solid articles, and then add the oils, and alcohol: digest eight or ten days in a hot sun heat, shaking it several times a day; then strain or filter, and bottle up for use. Dose, from one to two tea-spoonsful, repeated if circumstances require. Useful for the same purposes, that the two foregoing are.

COLIC MIXTURE.

Take of,	
Oil of anise,	2 drachms,
Oil of lavender,	2 " "
Oil of peppermint,	2 " "
Oil of cinnamon,	2 " "
Diaphoretic tincture,	1 $\frac{1}{2}$ pints,
Tincture of Lady's slipper,	$\frac{1}{2}$ " "

Mix, and bottle for use. Dose, from a half to a tea-spoonful. Good for flatulence, colic, pains at the stomach and bowels: also good to relieve faintness, and sickness at the stomach.

HYSTERIC DROPS.

Take of,

Tincture of Lady's slipper,	4 oz.
Tincture of lobelia,	4 oz.
Diaphoretic drops,	4 oz.
Guin camphor,	$\frac{1}{2}$ oz.
Asafetida,	$\frac{1}{2}$ oz.
Oil of peppermint,	$\frac{1}{2}$ oz.
Oil of anise,	$\frac{1}{2}$ oz.

Mix, and bottle for use, shaking it every time before using. Dose, from a tea-spoonful to a table-spoonful. Useful for colic, pains at the stomach, and for hysterics, it is particularly valuable.

NERVOUS COLIC DROPS.

Take of,

Dewberry brier root,	1 lb.
Burdock root,	1 lb.
Lady's slipper root,	1 lb.
White ash, inner bark,	1 lb.
Sassafras, bark of the root,	1 lb.
Wild cherry, inner bark,	1 lb.

Bruise all the articles, and put them into three gallons of water; boil down to one gallon; then strain through a flannel cloth, and add one quart of diaphoretic tincture. Dose, from one to four table-spoonsful, three times a day, or oftener if necessary. This preparation is good for nervous colic, night-mare, dysentery, &c.; also good to cleanse the blood.

AROMATIC CORDIALS, AND ESSENCES.

THESE are pleasant drinks, often very grateful to sick; and this is their principal use, not being employed as active medical agents.

ESSENCE OF ANISE.

Take of,	
Oil of anise,	2 oz.
Alcohol,	1 pint.

ESSENCE OF PEPPERMINT.

Take of,	
Oil of peppermint,	4 oz.
Alcohol,	1 quart.

ESSENCE OF CINNAMON.

Take of,	
Oil of cinnamon,	3 oz.
Alcohol,	1 $\frac{1}{2}$ pints.

Other essences may be made by observing the same rule.

AROMATIC CORDIALS.

Take of,	
Loaf sugar,	1 lb.
Boiling water,	1 quart,
Essence of peppermint,	4 oz.
French or peach brandy,	1 pint.

Let the sugar dissolve in the water, before you add the essence and spirit; then mix, and shake well together.

ANOTHER FORMULA.

Take of,	
Loaf sugar,	1 lb.
Essence of anise,	4 oz.
Brandy,	1 pint,
Boiling water,	1 quart.

Cordials may be made with any of the essences, by observing the same proportions.

COMPOUND AROMATIC CORDIAL.

Take of,	
Tansey,	4 oz.
Rue,	4 oz.
Peach kernels pulverized,	4 oz.
Boiling water,	4 quarts,

Simmer down to three quarts; then strain off the decoction, and add two pounds loaf sugar, eight ounces of the essence of peppermint, and four ounces of the essence of anise:—shake well together, and bottle for use. Dose, from one to three table-spoonsful, repeated as circumstances may require. This preparation is good to improve the appetite in weak patients, and to promote recovery from fevers, after the disease has been removed by proper remedies.

DIAPHORETICS AND SUDORIFICS.

MEDICINES of this class are employed to promote perspiration: articles that produce copious perspiration are distinguished by the name of sudorifics. We shall, however, not notice this distinction, as both operate on the same principle. This is a very important class of medicines in the healing art, as no complaint in which there is morbid action, can be successfully treated without it.

The compounds given under this head are useful for colds, obstructions, and in the first attacks of any complaint, as they not only tend to promote perspiration, and thereby discharge the morbid matter, and clear out obstruction, but they also give tone and firmness to the muscular fibers, and strengthen and sustain the living power. It will be found useful to employ some diaphoretic during the time of administering an emetic, as their use during that operation not only renders it more easy and efficient, but prevents that prostration of the living power, which always follows that operation, where diaphoretics are not used. Our diaphoretic powders may be employed in all cases where the "*composition powders*" of Dr. Thomson, would be useful; and we hope it will not be considered disrespectful to that great medical reformer, if we say our composition is as good as the one he recommends, and perhaps a little better. For the simple articles of this class, the reader is referred to the class of diaphoretics in *materia medica*, where he will find them described, together with the method of administering, and the quantity for a dose.

DIAPHORETIC POWDERS.

Take of,

Sumach, bark of the root,	1 lb.
Butterfly root,	1 lb.
Hemlock, inner bark,	1 lb.
Bayberry,	1 lb.
White ginger,	1 lb.
Caraway seeds,	1 lb.
Seneka snake root,	1 lb.
Cloves,	4 oz.
African cayenne.	4 oz.

Reduce all the articles to a fine powder, and bolt or sift them through a fine sieve, and then mix them thoroughly. Dose, one tea-spoonful in hot water; the pa-

tient may have it sweetened, if preferred in that way. For children give less according to the rule found in this book at the close of the compounds.

For the sake of those who may not find it convenient to get all the articles in one compound, we shall give several good formulas; and then you may use the one you find best, or the one for which you can find the ingredients most readily.

ANOTHER FORMULA.

Take of,

Bayberry, bark of the root,	1 lb.
Sumach, bark of the root,	1 lb.
White ginger,	1 lb.
Hemlock bark,	1 lb.
Cayenne,	2 oz.
Cloves,	2 oz.

Finely pulverized, bolted or sifted, and mixed as above. Dose, a tea-spoonful, in hot water, sweetened, if preferred.

ANOTHER FORMULA.

Take of,

Black snake root,	8 oz.
Colic root,	8 oz.
Bayberry, bark of the root,	1 lb.
Ginger, pared,	1 lb.
Hemlock bark,	1 lb.
Cloves,	2 oz.
Capsicum,	2 oz.

Prepared and administered as above.

ANOTHER FORMULA.

Take of,

Bayberry, bark of the root,	12 oz.
Ginger,	8 oz.
Hemlock bark,	4 oz.
Cloves,	1 oz.
Cayenne,	1 oz.

Prepared and administered as the first recipe directs.

ANOTHER FORMULA.

Take of,	
African cayenne,	4 oz.
Cloves,	4 oz.
Sassafras, bark of the root:	8 oz.
Colic root,	8 oz.
Witch hazel leaves,	8 oz.
Sumach leaves,	8 oz.
Ginger,	8 oz.
Bayberry,	8 oz.
Hemlock bark,	8 oz.
Lady's slipper,	8 oz.
Golden seal,	8 oz.
Red raspberry leaves,	8 oz.
White sumach, bark of the root,	8 oz.

Reduce all the ingredients to a fine powder, bolt or sift, and mix thoroughly. Dose, a heaping tea-spoonful in a gill of hot water, drank as hot as can be borne. This compound not only promotes perspiration, but it is an excellent remedy for dysentery, diarrhea, &c. It may be remarked that all the compounds under this head are good for these complaints, but this is more particularly valuable.

SUDORIFIC POWDERS.

Take of,	
Bayberry, bark of the root,	1 lb.
Lady's slipper root,	1 lb.
White ginger,	1 lb.
Hemlock bark,	1 lb.
Cayenne,	8 oz.
Cloves,	8 oz.

Reduce all the articles to a fine powder, and bolt or sift them through a fine seive. Dose, a tea-spoonful in hot water, drank as warm as can be borne.

ANOTHER FORMULA.

Take of,	
Seneka snake root,	8 oz.
Hemlock bark,	8 oz.
White ginger,	8 oz.
Butterfly root,	8 oz.
Bayberry, bark of the root,	8 oz.
Sassafras, bark of the root,	8 oz.
Cloves,	8 oz.
Cayenne.	8 oz.
Rattle root,	8 oz.
Lady's slipper root	1 lb.

Prepared, and administered as the one above. This compound, and the one above, are the proper ones to use when copious perspiration is to be produced, or when the patient is in the vapor bath.

ANOTHER FORMULA.

Take of,	
Hemlock, inner bark,	4 oz.
Sassafras, bark of the root,	4 oz.
Lady's slipper,	4 oz.
May weed,	4 oz.
Ginger, pared,	2 oz.
Cayenne,	1 oz.

Prepared, and administered as the foregoing formulas. This compound will be found a very useful one to use during the operation of an emetic. It will facilitate both the operation, and good effect of an emetic.

SWEATING POWDERS.

Take of,	
Hemlock, inner bark,	4 oz.
Shell-bark hickory, ross or outside bark,	4 oz.
Ginger,	4 oz.
Sumach, bark of the root,	4 oz.

Sassafras, bark of the root,	4 oz.
Cayenne,	1 oz.
Cloves,	1 oz.

Reduce all the ingredients to a fine powder, and mix them thoroughly. This compound will be found a very good one to produce a free perspiration.

DIAPHORETIC TINCTURE.

Take of,	
Gum myrrh,	1 lb.
Peach kernels,	2 oz.
Blue flag, green root,	1 oz.
African cayenne,	1 oz.
Alcohol,	4 quarts.

Pulverize all the solid ingredients, and add them to the alcohol:—the blue flag root being fresh, can only be bruised. Digest eight or ten days in a hot sun heat, shaking it two or three times a day. This tincture is not only valuable for its diaphoretic properties; but it is also good for colds, pains in the stomach, colic, headache, dysentery, diarrhea, internal inflammation, or mortifications, &c. Dose, from one to four tea-spoonsful, repeated at discretion.

ANOTHER FORMULA.

Take of,	
Gum myrrh,	8 oz.
Nutmeg,	$\frac{1}{2}$ oz.
Cayenne,	$\frac{1}{2}$ oz.
Alcohol,	2 quarts.

Reduce all the articles to a fine powder, and add them to the alcohol. Digest ten days, shaking it two or three times every day. Dose, from a tea-spoonful to a table-spoonful, repeated as often as circumstances require. Useful for the same purposes that the foregoing one is;

and it may be added, that few articles of medicine, can be found of more general utility for family use, than the two above described tinctures. Where the bathing drops, described in this work are not at hand, either of these tinctures, make a valuable substitute, both in easing pain, or arresting mortification.

DIAPHORETIC DROPS.

Take of,	
Gum myrrh,	8 oz.
Blue flag root, fresh,	4 oz.
Capsicum,	2 oz.
Alcohol,	2 pints..

Reduce the myrrh, and capsicum to a fine powder, and bruise the blue flag root well; then put them into the alcohol, and digest ten days in a hot sun heat, shaking it often, then strain or filter, and bottle up for use. Dose, from one to three tea-spoonsful, repeated as often as the case may require. This preparation is stronger than either of the foregoing, and is to be used in the more obstinate cases, where the others prove too weak.

DIURETICS.

ARTICLES of this class are employed to promote an increased discharge of urine, and are valuable in the treatment of dropsy, gravel, stranguary, &c. The simple articles recommended, for these complaints, may be found under the head of Diuretics in *materia medica*, to which we refer the reader for a description of them, together with the method of preparing and using them.

DIURETIC POWDERS.

Take of,	
Golden rod,	4 oz.
Queen of the meadow,	4 oz..

Spearmint,	4 oz.
Dwarf elder bark	4 oz.
Bitter root,	4 oz.
Burdock root,	4 oz.
Egg shells, browned,	2 oz.

Reduce all these articles to a fine powder, and sift them through a very fine sieve; and then bottle them up to preserve them from the air. Dose, a tea-spoonful in hot water, or in a tea of water-melon seeds, three times a day. Useful to relieve suppressions of urine, and increase its discharge; also good to carry off the dropsical fluid from the body.

ANOTHER FORMULA.

Take of,	
Wild potatoe,	6 oz.
Parsley,	6 oz.
Horse radish,	4 oz.
Yellow parilla,	4 oz.
Agrimony,	4 oz.
Sweet elder,	6 oz.
Milk weed,	4 oz.

To be prepared and used in same manner that the one above is; and is useful for the same purposes..

DIURETIC BEER.

Take of,	
Juice of elder berries,,	1 quart,
Sweet cider,	1 quart,
Honey,	1 pint,
Yeast,	1 gill,

Pour all these articles together, and shake them until thoroughly mixed; let it stand until it ferments, then add 4 oz. of the essence of golden rod, 4 oz. of the es-

sence of winter-green, 4 oz. of the essence of juniper berries, and one pint of Holland gin.—Mix all well together, and bottle up for use. Dose, from one to two table-spoonsful, three times per day. Useful in drop-sies, gravel, suppression of urine, &c.

DIURETIC SIRUP.

Take of,	
Black snake root,	12 oz.
Horse radish root,	12 oz.
Elder bark,	12 oz. .
Golden rod,	12 oz.
Ashes of summer grape-vine root,	8 oz.

Pulverize the solid ingredients, then add two gallons of cider;—boil down to one, then strain off the decoction, and add one quart of molasses, and one quart of Holland gin. Shake it well together, and bottle up for use. Dose, from half a gill to a whole one, two or three times a day.

ANOTHER FORMULA.

Take of,	
Sour-wood leaves,	12 lbs.
Wild cherry leaves,	6 lbs.
Black snake root,	1 lb.

Add water enough to cover all the articles, and boil them until the strength is extracted; then strain and boil down to two gallons; then add two quarts of molasses, and one quart of Holland gin; mix well; simmer a few minutes, and bottle up for use. Dose, one gill three times per day, increasing as the patient can bear it. Useful for dropsey, suppressions of urine, yaws, pleurisy, and the like; it is also a good tonic to use in recoveries from fever and ague.

DIURETIC CORDIAL.

Take of,	
Burdock root,	8 oz.
Horse radish,	8 oz.
Parsley,	8 oz.
Water-melon seeds,	8 oz.
Spearmint,	8 oz.
Yellow parilla, root,	8 oz.
Queen of the meadow,	8 oz.
Juniper berries,	8 oz.
Elder bark,	8 oz.

Bruise all the ingredients well, then add four gallons of water and boil down to two; strain off the decoction, and add, one gallon of molasses, one half gallon of Holland gin, two ounces of the essence of golden rod, two oz. essence of anise. Mix, and shake well together, and bottle up for use. Dose, half a gill twice a day, increasing in a few days to three times per day.

ASPARAGUS INFUSION.

Steep the bruised roots of asparagus in cold water, and drink of it frequently through the course of the day. This simple as it may appear, if continued a few days, is an effectual remedy for strangury.—[I. S.]

TINCTURE FOR GRAVEL.

Take of,	
Juice of red onions,	1 pint,
Juice of horse-mint plant,	1 pint,
Holland gin,	1 pint.

This is a most valuable remedy for gravel, often effecting a cure when other celebrated remedies have failed; and it always gives relief, even in those obstinate cases, where it can not effect a thorough cure..

HYDRAGOGUE TINCTURE.

Take of,	
Bark of sweet elder,	1 lb.
Good wine,	1 gallon.

Simmer one hour; strain and bottle up for use. Dose, a wine-glassful three or four times a day. This tincture is usefully administered in dropsical affections, particularly in abdominal dropsy, or ascites. It has cured many without any other ingredient.—[A. Practice.]

DIURETIC DECOCTION.

Take of,	
Golden rod plant,	1 lb.
Wild potatoe,	1 lb.
Elder bark,	1 lb.
Cider,	6 quarts.

Bruise or pulverize the solid ingredients, and then put them into the cider, and boil down to four quarts, strain, and bottle up for use. Dose, one gill, three times per day, increasing the dose after the first day or two, both in quantity and frequency. This decoction is a good diuretic, and is valuable in the treatment of gravel, dropsy, suppressions of urine, &c.

ANOTHER FORMULA.

Take of,	
Rushes, the fresh plant,	1 lb.
Water-melon seeds,	1 lb.

Bruise both articles, and make a strong decoction in water, or cider. Dose, a half pint, three or four times a day. This is a powerful diuretic, and will be found very valuable in gravel, and in dropsical complaints.

From the American Practice we transcribe the following valuable recipe.

ANOTHER FORMULA.

Take of,	
Queen of the meadow roots,	2 oz.
Milk weed,	2 oz.
Juniper berries,	2 oz.
Dwarf elder bark,	2 oz.
Spearmint,	2 oz.
Wild carrot seeds,	2 oz.

Bruise all the articles well in a mortar, and make a strong decoction. Dose, a half pint, to be taken often through the day. Useful for gravel, dropsy, and suppressions of urine.

ANOTHER FORMULA.

Take of,	
Roots of summer grape-vine,	8 oz.
Roots of horse radish,	8 oz.
Roots of parsley,	8 oz.
Smart weed,	8 oz.
Water-melon seeds,	8 oz.
Pumpkin seeds,	4 oz.

Bruise all these articles well in a mortar, and then add four gallons of water; boil down to one; then strain, and add one quart of honey, and one quart of Holland gin. Dose, a gill, three times a day. Excellent for gravel, dropsy and the like.

HEPATIC DIURETIC POWDERS.

Take of,	
Hepatic aloes,	2 oz.
Egg-shells, dried brown,	4 oz.
Spearmint plant,	6 oz.

Reduce all these articles to a fine powder, and sift them through a fine seive or piece of muslin, mixing them thoroughly. Dose, from a tea to a table-spoonful, two or three times a day. This preparation acts efficiently in expelling the water from dropsical patients,

and preventing the return of the disorder, after the dropical fluid has been expelled from the body. This medicine is also a most valuable corrector of the biliary system; and as a remedy for that debilitated, and bloated state of the system, that often follows the fever and ague, gravel, and some other complaints, it has but few equals, in the compass of remedies.

EMETICS.

EMETICS are employed for the purpose of ejecting the contents of the stomach when they become morbid or noxious. The propriety of administering them in the treatment of disease, was discovered by the most satisfactory indications, in the infancy of the "healing art." More unanimity of sentiment, among medical writers of all ages, and of all schools, has obtained on this point, than on any other indication in the treatment of disease: some, however, have approved of a recourse to it, often-er than others. All physiologists, since the days of John Hunter, have admitted that the stomach is the center of sympathy to the whole system; and consequent-ly if the contents of the stomach become vitiated, they must prove hurtful to the whole system; and if suffered to remain in that organ, in a morbid state, they must prove a fruitful source of disease: and not only so, but no patient can be restored to health, whilst his stomach is burdened with noxious matter. Should we attempt to remove this noxious matter from the stomach by means of cathartics, it will be exposed in its passage through the duodenum, and other parts of the intestinal canal, to the action of the lacteals, which will invariably take up a portion of this morbid matter as it passes, and pour it into the blood vessels, which will distribute it to all parts of the system; and thus a new source of irritation, to the already diseased system, would be created. This would at once corrupt the vital stream, and poison the

whole mass of fluids, which must rapidly weaken the living power, and give disease a deeper, firmer hold on the system. But if we employ a proper emetic to eject the noxious contents of the stomach, none of these objections lie against its use.

The simple articles employed as *emetics*, the reader will find in *materia medica* under the head "emetics," to which place he is referred for a description of the method of preparing and using them.

EMETIC WINE.

Take of,	
Lobelia, dry plant pulverized,	8 oz.
Maderia wine,	1 quart.

Digest ten days in a hot sun heat, shaking two or three times a day. Dose, from a tea to a table-spoonful, repeated every ten or fifteen minutes, until vomiting be produced.

EMETIC TINCTURE.

Take of,	
Lobelia, green herb bruised,	8 oz.
Alcohol,	1 quart,

Digest five or six days in a sun heat, shaking it every day. Dose, from a tea to a table-spoonful, repeated every ten or fifteen minutes until vomiting is produced.

TINCTURE OF LOBELIA SEEDS.

Take of,	
Lobelia seeds, pulverized,	5 oz.
Alcohol,	1 pint.

Digest ten days in a sun heat, shaking it well every day. This is the strongest and most active preparation

of the lobelia. Dose, from a tea to a table-spoonful, repeated every ten or fifteen minutes until vomiting is produced. This preparation is intended only for grown persons, where active remedies are required.

SIMPLE EMETIC POWDERS.

Take of the pulverized lobelia, a tea-spoonful, repeated every ten or fifteen minutes until vomiting is produced. These powders must be taken in a warm tea of diaphoretic powders. Be careful not to put the powdered lobelia in the tea when it is hot enough to scald, or it will destroy all the virtue of the lobelia.

When taking an emetic of any of the above preparations of lobelia, the patient should drink freely of a tea of diaphoretic powders, pennyroyal, sassafras, or even warm water. This not only facilitates the operation of the emetic, but promotes its good effect, and aids in sustaining the living power;—this remark is particularly applicable to the use of the diaphoretic tea.

Lobelia in any of its preparations, operates in a very salutary manner as an emetic, throwing off of the stomach whatever is noxious or morbid, and seldom any thing else. And although its activity as an emetic, and its efficiency in checking and subduing morbid action in the system, very often alarm persons not well acquainted with its operation and effects, yet the sure lesson of experience authorizes us to say that it is a safe emetic, and one of the best in the compass of medicine. If the patient will drink copiously of the tea of diaphoretic powders during the time of his taking an emetic of lobelia, it does not produce that prostration of strength that usually follows the operation of mineral emetics. And it should be the practice of every physician to husband with nicest economy, the strength of his patients, to reject scrupulously, the use of such medicines as have a direct tendency to weaken the power of life; and to em-

ploy only such as have a direct tendency to restore at once a healthful action to the enfeebled, or obstructed organs of the body. There are many articles of food that will satisfy hunger, although they may be neither very wholesome, or nourishing to the body; and so there are many articles of medicine that operate with safety as emetics, but will not all have the same salutary effect upon the system. No emetic, we have ever tried has an effect so powerful, and salutary in checking and subduing diseased action of every kind and removing obstructions in any part of the system, as lobelia has.

COMPOUND EMETIC POWDERS.

Take of,	
Lobelia seeds,	6 oz.
Sea ash, inner bark,	1 oz.

Reduce both articles to a fine powder, and sift them through a very fine sieve or piece of muslin, and mix thoroughly. Dose, a tea-spoonful, taken in warm water or tea, about milk warm, repeated every ten or fifteen minutes, until vomiting is produced. This is a very safe, and valuable emetic.

ANOTHER FORMULA.

Take of,	
Lobelia seeds,	4 oz.
Cayenne,	1 oz.
Lady's slipper root,	1 oz.

Pulverize all the articles, and sift through a fine sieve, and then mix them well together. Dose, a heaping tea-spoonful, repeated every ten or fifteen minutes until vomiting be produced. These powders are also to be taken in warm tea, or water as the above. This preparation is better adapted for persons liable to a cramp in the stomach.

COMPOUND EMETIC TINCTURE.

Take of,	
Lobelia seeds,	4 oz.
Sea ash, inner bark,	1 oz.
Lady's slipper root,	1 oz.
Cayenne,	1 oz.
Diaphoretic tincture,	1 quart.

Pulverize all the solid ingredients, sift them through a fine sieve; then add the diaphoretic tincture:—Digest eight or ten days shaking it well every day. Dose, from a tea to a table-spoonful, repeated every five minutes, if the case be urgent, until vomiting be produced. This is to be used in cases of violent attacks of disease, or when poisons have been taken into the stomach, and in short, whenever active emetics are required. Shake it up every time before using.

ANOTHER FORMULA.]

Take of,	
Lobelia seeds,	4 oz.
Cayenne,	1 oz.
Lady's slipper,	1 oz.
Pearl-ash,	1 oz.
Diaphoretic tincture,	1 quart.

Reduce all the solid articles to a fine powder, sift through a fine sieve; then add the tincture. Digest eight or ten days, shaking it well every day. Dose, from a tea to a table-spoonful, repeated every ten or fifteen minutes, until vomiting be produced. This preparation is a valuable emetic where the patient has a sour stomach. Shake well before using.

ESCHAROTICS OR CAUSTICS.

ESCHAROTICS are articles that will corrode or destroy both the sound and unsound parts of the body. We,

however, disapprove entirely of the application of substances of this kind to any but diseased, or fungous parts; and to these but seldom: it will therefore be unnecessary to give many receipts under this head.

Mandrake, or may-apple root, well dried and pulverized, is a good article to remove or destroy fungus or proud flesh, by sprinkling a little on once every two days.

Soot is also good to remove proud flesh from wounds, ulcers, &c.—said to be much better than burnt alum.

Mix a sufficient quantity of fine salt with the yolk of an egg to make it about the consistence of salve; and apply this to the affected part.

VEGETABLE CAUSTIC:

Take a quantity of ash-bark, while green, and burn it into ashes on a clean hearth. When the ashes have cooled, put them into a clean vessel of water; and boil them until they make a strong lye. Let the ashes settle and pour off the lye carefully; put it into a well scoured pot, and boil it until reduced to the consistence of molasses: then increase the heat until the vessel becomes nearly red hot, and keep it so until it begins to become dry; then take it off and stir it briskly until it crumbles. After it has become nearly cool, bottle up, and cork it with a bunch of tow or cotton. This preparation is an excellent caustic.

ANOTHER.

Make a strong lye of hickory, or oak ashes; put it into an iron kettle, and evaporate till dry;—pulverize and preserve it in closed vessels.

Use.—This caustic is highly useful in the treatment

of fistulas, and indolent ulcers of every character. It removes fungous flesh without exciting any inflammation, and acts but little except on spongy or soft flesh. It is useful in cancers and in every case where a caustic is required.—[*American Practice.*]

EXPECTORANTS.

MEDICINES of this class are employed for the purpose of loosening, and promoting the discharge of mucus, phlegm, &c. from the throat and lungs. For the simple articles of this class, see “*Expectorants*” in *materia medica*.

EXPECTORANT POWDERS.

Take of,	
Lung-wort,	8 oz..
Skunk cabbage root,	4 oz.
Star root,	4 oz.
Rattle root,	4 oz.
Lobelia seeds,	4 oz.
Cayenne,	2 oz.

Finely pulverize all the ingredients, and bolt or sift them through a fine piece of muslin; and then mix them well together. Dose, from half to a tea-spoonful, taken in molasses or honey, two or three times per day. Useful in coughs, promoting a discharge of the phlegm or mucus from the throat and lungs.

ANOTHER FORMULA.

Take of,	
Star root,	4 oz..
Bitter root,	4 oz.
Skunk cabbage root,	4 oz.
Bayberry, bark of the root,	4 oz.
Indian turnip,	4 oz.

Lobelia seeds,	4 oz.
Cayenne,	2 oz.

Prepared and used as the above:—dose and use the same.

ANOTHER FORMULA.

Take of,	
Hoarhound, dry plant,	2 oz.
Sage dry,	2 oz.
Indian turnip,	2 oz.
Columbo root,	2 oz.
Elecampane,	2 oz.
Lobelia seeds,	2 oz.
Cayenne,	1 oz..

Method of preparing and using, the same as the above:—dose and use the same.

ANOTHER FORMULA.

Take of,	
Butterfly root,	4 oz.
Bayberry, bark of the root,	4 oz.
Bitter root,	2 oz.
Lady's slipper,	2 oz.
Capsicum,	1 oz.

Prepared and used as the foregoing:—dose and use the same.

COUGH DROPS.

The simple tincture of lobelia, is for most cases, very valuable for coughs, taken in doses of a tea-spoonful; and for asthmatic complaints we have never found its equal.

COMPOUND COUGH DROPS.

Take of,	
Tincture of lobelia,	1 pint,

Diaphoretic tincture,	$\frac{1}{2}$	"
Tincture of lady's slipper,	$\frac{1}{4}$	gill.

Mix, and shake it well together. Dose, a tea-spoonful, repeated every hour or two if necessary. Useful for coughs, phthisics, &c.

EXPECTORANT SIRUP.

Take of,		
Star root,	8 oz.	
Spikenard root,	8 oz.	
Lung-wort,	8 oz.	
Elecampane,	8 oz.	
Colt's-foot, roots and tops,	8 oz.	
Rattle root,	8 oz.	
Bitter root,	8 oz.	

Bruise all the articles well, and boil them in three gallons of water, down to six quarts; strain off the decoction, and add four quarts of good honey and two quarts diaphoretic tincture and bottle up for use. Dose, a table-spoonful three times a day. Useful for coughs, consumptions, and all complaints of the lungs.

ANOTHER FORMULA.

Take of,		
Lung-wort,	8 oz.	
Spikenard root,	8 oz.	
Caraway seeds,	8 oz.	
Hoarhound,	8 oz.	
Liquorice root,	8 oz.	
Cayenne,	2 oz.	

Bruise all the articles, and boil them in two gallons of water, down to one; strain off the decoction; then add four pounds brown sugar and two quarts of French brandy; simmer until the sugar is dissolved, and then bottle up for use. Dose, from a half to a table-spoon-

fill three times a day. Useful for coughs, consumptions, and complaints of the lungs generally.

ANOTHER FORMULA.

Take of,	
Best vinegar,	1 gill,
Good honey,	1 "
Pure water,	1 "
Fresh butter,	2 oz.
Cayenne,	1 oz.

Mix all the ingredients together, and simmer a few minutes, and it is ready for use. Dose, one table-spoonful, taken warm, three times per day, or oftener if necessary. Valuable for coughs;—if taken just before going to bed, it generally relieves a troublesome cough, securing a good nights rest:—if not, repeat the dose.

ANOTHER FORMULA.

Take of,	
Pleurisy root,	4 oz.
Star root,	4 oz.
Lung-wort,	4 oz.
Elecampane,	4 oz.
Spikenard,	4 oz.
Bayberry root,	4 oz.
Umbil root,	4 oz.
Liquorice root,	4 oz.
Capsicum,	2 oz.

Bruise all the articles, and boil them in three gallons of water down to one; strain off the decoction, and add four pounds brown sugar, and one quart of the tincture of lobelia, then bottle up for use. Dose, from one to four tea-spoonsful, three times per day. Useful for coughs, phthisics, and complaints of the lungs generally.

HONEY SIRUP.

Take of,	
Common beets,	1 lb.
Spikenard roots,	1 lb.
Hoarhound, plant,	$\frac{1}{2}$ lb.
Elecampane,	1 lb.

Add water enough to boil them until the strength is extracted; strain off the decoction, and when cool add honey enough to make a good sirup. Dose, a spoonful several times a day. Useful for coughs, consumptions, &c.—[J. S.]

ONION SIRUP.

Take any desired quantity of onions, and roast them in the fire; then peel off the outside, press out the juice, and sweeten with honey, molasses, or sugar. This sirup is excellent for colds, coughs, and complaints of the lungs generally. Dose, from a tea to a table-spoonful, repeated at pleasure.—[id.]

EYE WATERS.

THESE are washes employed to remove inflammation from, or to heal sore eyes.

EYE WATER.

Take of,	
Witch hazel leaves,	1 oz.
Golden seal,	1 oz.
White sumach, bark of the root,	1 oz.
Lady's slipper,	1 oz.

Pulverize all the ingredients, and boil them in a quart of water down to one pint; strain off the decoction, and

add one gill of the tincture of lobelia, and bottle up for use. This may be applied to sore or inflamed eyes, either by wetting the end of the finger with it and touching it to the eye, or by dropping one drop in each eye.

TONIC EYE WATER.

Take of,	
Tincture of lobelia,	1 oz.
Decoction of golden seal,	1 oz.
Decoction of sumach, bark of the root,	1 oz.

Mixed, and shaken well together, and applied as above directed.

CHRONIC EYE WATER.

Take of,	
Gum myrrh,	1 oz.
Lady's slipper,	1 oz.
Lobelia seeds,	1 oz.
Camphor,	1 drachm,
Cloves,	1 drachm,
Loaf sugar,	4 oz.
Alcohol,	1 pint.

Pulverize all the solid articles finely, and digest them in the alcohol ten days in a sun heat. When this tincture is used, put a small portion of it in an equal quantity of new milk, and apply it to the eye, as above directed.

INFUSION FOR SORE EYES.

Take of,	
Pith of sassafras,	$\frac{1}{2}$ oz.
Pure water,	1 gill.

Infuse two or three hours, and it will be ready for use. Wash the eyes with this infusion several times a day. This wash is particularly useful for inflammatory sore eyes.

INJECTIONS OR CLYSTERS.

ALTHOUGH the propriety of employing injections in the treatment of disease, appears to have been discovered in the infancy of the "*healing art;*" yet their great virtue seems generally to be but imperfectly appreciated by the gentlemen of the Faculty. And in most cases, where they have recommended their use, comparatively small benefit has been derived from them, being usually composed of inert materials. The prevailing opinion heretofore, with a few exceptions, has been that injections, were only indicated in obstinately costive states of the intestines; and it was generally deemed a matter of small importance of what materials they were composed. But experiments of the most satisfactory kind, have shown by the most indubitable results, that medicated injections, may be employed with the greatest success in most obstinate, or violent complaints. In obstinate costive habits, and in fevers, particularly those of the typhoid type, the necessary evacuation of excrementitious matter from the intestines, can be procured, by the use of properly medicated injections, with a much greater salutary effect, than by the employment of injurious laxatives, or debilitating purgatives. In inflammations, or mortifications either of the bowels or of the womb, no method of administering medicine can so readily and effectually, give entire relief, as administering the proper medicines by injections; and we doubt not that hundreds have lingered long, and perhaps died, for want of a few injections. In cases of suspended animation, either from drowning or any other cause, warm, stimulating injections have a most powerful and salutary effect, in connection with other means, to restore animation, as the intestines are known to be more susceptible of impression than any other organ within the immediate reach of medicine.

Clysters or injections are perfectly safe in all cases, and if properly prepared, will have a good effect in all violent complaints; and it may be added that so impor-

tant and valuable are they, that it would be better to use them a dozen times, when not needed, as to neglect them once when they are. When the patient can not swallow, or can not retain on the stomach, either food or medicine, which is sometimes the case, both food and medicine, may be administered by injections. Where injections are employed to give nourishment to the system, they should be composed of rich broths or nourishing soups; and the patient should retain them as long as possible, that the absorbents may take up the nutritious particles. Any medicine, that would be proper to give by the mouth, may be given by injection, when the patient cannot swallow it.

A pewter syringe is perhaps the most convenient instrument for giving an injection, though a bladder and a quill, may be substituted. Every family would do well to furnish themselves with a syringe. The use of the syringe is so readily understood, when seen, that we deem it unnecessary to give any directions about the method of using one.

STIMULATING INJECTION.

Take of,	
Diaphoretic powders,	2 drachms,
Diaphoretic tincture,	4 drachms,
Hot water,	1 pint.

Pour the hot water on the powders, let it stand a few minutes, until the strength is extracted, and the powders settled; pour it off gently, leaving the grounds, then add the tincture, and when about milk warm, it is ready to be administered. Useful to stimulate the bowels when inactive; and is a valuable clyster to take when the patient is ready to go into the vapor bath: a valuable auxiliary to promote perspiration.

STIMULATING TONIC CLYSTER.

Take of,	
Golden seal,	2 drachms,
Bayberry,	2 drachms,
Diaphoretic tincture,	4 drachms,
Hot water,	1 pint.

Prepared for administering as the foregoing one; and may be used for the same purpose:—it is however, better calculated to give tone and strength to the intestines, when relaxed and enfeebled;—also has some efficacy in checking inflammation of the bowels.

ANTISEPTIC CLYSTER.

Take of,	
Slippery elm, inner bark,	2 oz.
Antiseptic tincture,	$\frac{1}{2}$ oz.
Hot water,	1 pint.

Steep the bark in the hot water until it becomes nearly cool enough to administer, then pour off the water, and add the tincture. This clyster is excellent for dysentery, diarrhea, flux, &c.; also valuable to arrest inflammation of the bowels.

ANOTHER FORMULA.

Take of,	
Sumach, inner bark of the root,	2 drachms,
Bayberry, bark of the root,	2 drachms,
Lady's slipper,	2 drachms,
Diaphoretic tincture,	4 drachms,
Hot water,	1 pint.

Pulverize the solid ingredients, and steep them in the hot water until the strength is extracted; pour off gently, and add the tincture. Valuable for the same purpose as the one above; also good to relieve spasms in the intestines.

ANOTHER FORMULA.

Take of,	
Charcoal, prepared,	1 oz.
Yeast,	2 oz.
Sweet milk,	1 pint.

Mix, and shake well together; make the whole mass about milk warm, and it is ready to administer. Valuable to prevent, or remove inflammations or mortifications of the bowels.

LAXATIVE CLYSTER.

Take of,	
Diaphoretic powders,	$\frac{1}{4}$ oz.
Butternut sirup,	1 oz.
Diaphoretic tincture,	$\frac{1}{2}$ oz.
Hot water,	1 pint.

Steep the powders in the water until the strength is extracted; pour off, and add the sirup and tincture.

ALKALINE CLYSTER

Take of,	
Bayberry,	$\frac{1}{4}$ oz.
Pearl ash,	$\frac{1}{4}$ oz.
Hot water,	1 pint.

This is an excellent clyster for fevers, particularly the nervous fever; also when the intestinal canal becomes coated with mucus, or with any acrid matter.

ASTRINGENT CLYSTER.

Take of,	
Bayberry,	$\frac{1}{4}$ oz.
Hemlock bark,	$\frac{1}{4}$ oz.

Diaphoretic tincture,	$\frac{1}{2}$ oz.
Hot water,	1 pint.

Pulverize the solid ingredients, and then steep them in the hot water; pour off and add the tincture.

LINIMENTS AND OINTMENTS.

THESE are medicated preparations, of a softer and thinner consistence than salves, that are applied externally, by frictions, and embrocations. Valuable preparations of this kind may be made to any desirable extent; but we shall only give a few that we consider most valuable.

OINTMENT FOR SCALDS OR BURNS.

Take of,	
Spirits of turpentine,	1 oz.
Sweet oil,	1 oz.
Linseed oil,	1 oz.
Pearl-ash water,	1 oz.

Mix, and apply this ointment to a scald or burn, and it will take out the fire, and remove inflammation.

RELAXING OINTMENT.

Take of,	
Plantain leaves,	2 oz.
Black sumach, bark of the root,	2 oz.

Stew these articles in hog's lard or fresh butter. This makes a most excellent ointment for hard or inflamed swellings. It is perhaps one of the best simple remedies, we know of, to relieve a caked and inflamed breast.

NERVE OINTMENT.

Take of,	
May weed flowers,	4 oz.
Catnip,	4 oz.
Smart weed,	4 oz.
Worm wood,	4 oz.
Bear's foot root,	4 oz.
Black sumach, bark of the root,	4 oz.
Cayenne,	2 oz.

Bruise all the ingredients well, then add three pounds of bear's oil if to be had, if not, any soft animal oil;—simmer three hours over a slow fire; then strain, and press out the oil. Valuable for sprains, bruises, tumors, hard swellings, and the like.

DISCUTIENT OINTMENT.

Take of,	
Smart weed,	8 oz.
May weed, flovers,	8 oz.
Hog's lard,	1 lb.

Bruise the solid articles well, and then add the lard, and simmer two or three hours; strain, and press out the oil. This ointment is useful for tumors, hard swellings, wens, and risings of almost every kind.

WELL'S SCROFULOUS OINTMENT.

Take of,	
Tobacco, best quality,	1 oz.
White ash moss,	4 oz.
Soot,	4 oz.
Hog's lard,	4 oz.
Tar,	4 oz.
Antispasmodic drops,	2 oz.

Boil the tobacco, moss, and soot, in two gallons down to one; then strain, and boil down to one quart; then add the lard and tar, and simmer over a fire of coals, down to a pint and a half, and then add the antispasmodic tincture, and stir till cool. This ointment is applied to scrofulous ulcers, scald head, itch, and all diseases of the skin.

GREEN OINTMENT.

Take of,	
Tansey,	1 oz.
Catnip,	1 oz.
Hops,	1 oz.
Worm-wood,	1 oz.
Hoarhound,	1 oz.

Bruise them and put them into a kettle; cover over with spirits and lard, and let it stand two weeks; then simmer a while and strain. Add of white turpentine, one tenth as much as the whole mass. This ointment is cooling, resolvent, relaxing and emollient. It is very useful in sprains, contusions, swellings, dislocations, contracted sinews, &c. —[*American Practice.*.]

ITCH OINTMENT.

Take of,	
Diaphoretic tincture,	4 oz.
Spirits of turpentine;	1 oz.
Balsam of fir,	1 oz.
Sweet oil,	2 oz.
Gum camphor,	$\frac{1}{2}$ oz.
Mix, and shake well together:—Useful for the itch..	

ITCH OINTMENT.

Take of,	
Sweet gum wax,	2 oz.

Sweet oil,	4 oz.
Balsam of fir,	1 oz.
,	

Melt all the ingredients together, and it is fit for use.

ANOTHER FORMULA.

Take of,	
Expressed juice of narrow dock,	4 oz.
Fresh butter,	4 oz.

Simmer a few minutes and it is ready for use.

VOLATILE LINIMENT.

Take of,	
Sweet oil,	1 oz.
Spirits of hartshorn,	$\frac{1}{2}$ oz.

Shake them well together. Moisten a piece of flannel with this liniment, and apply it to the throat, in the inflammatory quinsy, renewing it every four or five hours, is a most efficacious remedy for that complaint, seldom failing to effect a cure.—[*Botanic Physician.*]

POULTICES OR CATAPLASMS.

THESE are pulpy, or mucilaginous compounds applied externally to tumors, ulcers, and inflamed parts; and are employed either to disperse tumors, promote suppuration, or reduce inflammation.

ANTISEPTIC POULTICE.

Take of,	
Sweetmilk,	1 pint,
Water,	1 "

Cayenne, pulverized,	1 oz.
Pearl-ash,	1 oz.
Bayberry, pulverized,	2 oz.

Put all the articles into an iron vessel; boil a few minutes, stirring it well at the same time. Then take equal parts of finely pulverized charcoal of hickory wood, and corn meal, and stir in until it becomes a proper consistence for a poultice. Spread it on a cloth, and when cool, wet it with the antiseptic tincture; then apply it to the affected part, keeping the cloth wet with cold spring water, and keeping the patient in a gentle perspiration at the same time. This poultice, with this treatment, is one of the most powerful antiseptic poultices, we have ever tried, and seldom fails to arrest mortifications, of the most obstinate kind.

DRUG POULTICE.

Take the drugs of the antiseptic tincture, spread them on a piece of cloth, wetting the poultice with bathing drops; apply it to the affected part, keeping it wet with cold spring water as fast as it dries, and renew the poultice once or twice a day. This poultice is valuable for strains, bruises, rheumatic pains, indolent ulcers, and risings of every kind, particularly the white swelling, if applied before matter is formed, it will put it back; but if matter is formed it will draw it to a head without much pain, and perform a cure without suffering the bone to become affected.

ANTISEPTIC POULTICE.

Take of,	
White sumach, bark of the root,	4 oz.
Sassafras, bark of the root,	4 oz.
Slippery elm, inner bark,	4 oz.
Ginger,	2 oz.

Pulverize all the ingredients, and mix them well together; boil it in sweet milk to the proper consistence for a poultice. Valuable for most kinds of foul ulcers, and it possesses the power of resisting mortification in a high degree.

ASTRINGENT ELM POULTICE.

Make a strong tea of hemlock bark, with a small portion of ginger in it; then thicken with equal parts of elm bark, and crackers, both finely pulverized. This poultice will be found a valuable antiseptic, and is useful in most cases where such are required.

SUMACH POULTICE.

Take of the inner bark of the root, of the white sumach, finely pulverized, and boil it in sweet milk to the consistence of a poultice. This is a valuable poultice for wounds, inflamed swellings, particularly inflammations, and swellings in the female breast, also good for those inflammations, and swellings, which affect the bone.

CARROT POULTICE.

Take of,	
Boiled carrots, well mashed,	1 lb.
Flour,	1 oz.
Butter,	$\frac{1}{2}$ oz.

Mix them with as much warm water as to form a pulp. This will be found a valuable application to ulcerated sores and swellings, scrofulous sores of an irritable kind, and many other inveterate ulcers.—*American Practice.*

YEAST POULTICE,

Take one pint of yeast, and thicken it with equal parts of charcoal and elm bark, both well pulverized. Valuable for ulcers in a gangrenous or mortified condition.

ALKALINE POULTICE.

Take of lye, rather weak, beat it and thicken it with elm bark well pulverized. This poultice is valuable for inflammation of the breast, and other parts, for felonies, white swellings, wounds, fistulas, lock-jaw, &c.
—[A. P.]

DISCUTIENT POULTICE.

Make a strong tea of white oak bark, and thicken it with corn meal to the consistence of a poultice; apply it hot as it can be borne, and change it every two hours.
—[E. Stedman.]

PLASTERS AND SALVES.

PLASTERS are applications made to weak, diseased or ulcerated parts, designed to increase the tone and activity of the vessels and organs in the affected part, and thus promote a cure. SALVES are applications made to ulcers, wounds, &c., to soothe and mollify the injured vessels, and the inflamed parts, and dispose them to heal by restoring a healthy action to the parts.

ADHESIVE AND STRENGTHENING PLASTER.

Take of,
White turpentine, 1 lb.

Bee's-wax,	8 oz.
Balsam of fir,	8 oz.
Diaphoretic tincture,	8 oz.

Put all the articles into an earthen vessel, and simmer over a slow fire until the liquid is all evaporated.

ANOTHER FORMULA.

Take of,	
Turpentine,	1 lb.
Mutton tallow,	8 oz.
Salt butter,	8 oz.
Balsam of fir,	8 oz.
Bee's-wax,	8 oz.
Camphor,	1 oz.

Put all into an earthen vessel, and simmer until they become of a proper consistence for a plaster. These plasters are valuable for deep wounds, or cuts, as they will confine the edges together, which will greatly facilitate their healing. Where the wound or ulcer is entirely covered by a plaster, small holes should be made through it, to permit the matter to escape.

ANOTHER FORMULA.

Take of,	
White resin,	3 lbs.
Bee's-wax,	4 oz.
Burgundy pitch,	4 oz.
Mutton tallow,	4 oz.

Melt all these articles together, and then add,

Sweet oil,	$\frac{1}{2}$ oz.
Camphor,	$\frac{1}{2}$ oz.
West India rum,	1 gill,
Oil of sassafras,	$\frac{1}{2}$ oz.

When the latter articles have been incorporated with the former, let the whole be poured into a vessel of water, and worked in the hands till cold. In some seasons, and climates a little more resin, or a little more sweet oil, is required, to make it of the right consistence.

Useful for rheumatism, wounds, cuts, ulcers, &c.—[*A. Practice.*]

CANCER PLASTER.

Take of,

Red clover blossoms,	6 lbs.
Poke leaves,	1 lb.
Narrow dock, roots, and tops,	1 lb.

Boil in water until the strength is extracted; strain and press out the liquid thoroughly; boil the decoction, taking great care to prevent it from scorching, until it becomes of a proper consistence for a plaster. Valuable for cancerous ulcers.

POKE CANCER PLASTER.

Take any desired quantity of ripe poke berries, and press out the juice and dry it on pewter or glass plates, in the sun, until it becomes the consistence of a salve. Spread it on a piece of bladder or muslin, and apply it to the cancer. This plaster is reputed as an efficient remedy for ulcers of the concretoe kind.

SORREL SALVE OR PLASTER.

Take a quantity of the common sheep sorrel; bruise, and press out the juice, and dry it on glass or pewter plates, in the sun, until it becomes of the proper consistence for a salve. Applied in the same way as the above; and useful for the same purpose; it is, however,

a more powerful remedy. One or two plasters of this kind, has often performed a cure of what had been regarded as an obstinate cancer.

CANCER BALSAM.

Take of,	
Balsam of fir,	4 oz.
Poke-berry plaster,	4 oz.
Sorrel salve,	4 oz.
Salt butter,	4 oz.

Melt all together, and when cool, apply as above directed:—use the same.

HEALING SALVE.

Take of,	
Balsam of fir,	1 lb.
Salt butter,	1 lb.
Mutton tallow,	1 lb.
Bee's-wax,	1 lb.
Turpentine,	2 lbs.

Melt, and mix all well together, simmering over a fire of coals, in an iron vessel, one hour. Valuable for sores, wounds, ulcers, &c. disposing them to heal, by aiding the diseased or injured part to assume a healthy action.

ANOTHER FORMULA.

Take of,	
Sweet gum wax,	4 oz.
Fresh butter,	4 oz.
Balsam of fir,	4 oz.
Bee's-wax,	4 oz.

Melt, and mix all well together by simmering over a fire of coals, one hour; strain through a strong cloth, and let it cool for use.—Use the same as the above.

SUMACH SALVE.

Take of,	
White sumach, bark of the root,	2 lbs.
Bear's foot root,	2 lbs.

Bruise and boil until the strength is extracted; then strain off the decoction, and add one pound of mutton tallow, and one pound of fresh butter; then simmer down to a proper consistence for a salve.

GREEN SALVE.

Take of,	
Turpentine,	$\frac{1}{2}$ lb.
Bayberry tallow,	$\frac{1}{2}$ lb.

Dissolve together, and form into a salve; add sweet oil if necessary. Valuable for scrofulous ulcers.—[A. Practice.]

YELLOW SALVE.

Take one half bushel of the roots of the Wild Indigo, and boil them until the strength is all extracted; strain the decoction, and again boil it skimming off what may rise to the top; add five pounds fresh butter, one pound, and a half of bee's-wax, and three fourths of a pound of mutton tallow; then simmer until all the water is evaporated; strain through a strong cloth. This salve is useful for all kinds of ulcers;—it is cleansing, detergent, and discutient.—[A. P.]

FELON SALVE.

Take of,	
Castile soap,	1 oz.
Balsam of fir,	1 oz.

Table salt,	1 oz.
Spirits of turpentine,,	$\frac{1}{2}$ oz.

Dissolve and mix together, and it is ready for use. This salve applied to the affected part, is good for felonies, renewing it as often as it becomes dry. If this salve be applied before the matter forms it will prevent its formation; but if not applied until it forms, it will stop its progress, you must however, let the matter out, then the ulcer will heal.

STYPTICS.

THESE are articles applied to wounds, and other bleeding surfaces to stop the flow of blood. In the class of 'astringents' in *materia medica*, the reader will find several articles valuable for this purpose. The following list contains the most valuable styptics, that are readily obtained, with which we are acquainted.

CRAKE'S BILL, dried and pulverized, and applied to the bleeding surface is a most powerful styptic; or it may be prepared and applied as directed in *materia medica*;—see page 170.

SASSAFRAS leaves, chewed fine, and applied to the bleeding surface, is also said to be very valuable to stop bleeding.

BAYBERRY, finely pulverized, and applied to the bleeding surface, I know from experience to be excellent.

MAY-APPLE ROOT, dried and pulverized, is recommended by some, as being good.

SOOT applied to a fresh cut is also said to be valuable to stop the flow of blood.

WHITE OAK, inner bark, dried and pulverized, is good for the same purpose. Red oak bark, used in the same way, is also good.

BURNT BONE, pulverized, and applied to a cut or bleeding surface, has been recommended by many as valuable.

A DECOCTION of hickory bark, of that kind termed

pignut, is highly recommended by Dr. Hough, and some others.

MISCELLANEOUS RECIPES.

UNDER this head, we shall present the reader with valuable recipes, for most complaints, most of which we have selected from various respectable authorities.

VOLATILE EPITHEM, OR PLASTER.

Take equal weights of common turpentine, and spirit of sal-amoniac, [hartshorn,] stir the turpentine in a mortar, and drop in the spirit gradually, till the whole is reduced into a white mass. This composition is useful to invite the blood, and other humors to the external parts; as in palsy, and atrophy, or to any weak part.—
[Richard Carter of Ky.]

CURE FOR CANCER.

Get the young growth of red or black oak, and burn it on a clean hearth;—make a strong lye of the ashes, and after it is settled and strained, boil it down to a sub-limate, and apply a plaster of it to suit the cancer. This plaster must not stay on more than five minutes at a time. When the pain, produced by the application of the plaster has subsided, take off the plaster, cleanse out the blood with a sponge, and apply the second, third, and so on until you judge it to be killed. Then cleanse it, and sprinkle a little burnt alum on it, and fill up the sore, and apply a poultice made thus: Boil the inside bark of slippery elm in water, and thicken it with milk and flour. Renew this poultice three or four times per day, until the cancer comes out by the roots. If the

cancer bleeds, apply some styptic to stop it. When the cancer has been taken out by the roots, make a mild salve of bee's-wax, sheep suet, and rosin and apply it once a day, continuing the same poultice above described, once a day also, until it heals.—[*Idem.*]

RHEUMATIC TINCTURE.

Take of,	
Bear's foot root,	.4 oz.
Gum guiacum,	2 oz.
Rattle root,	2 oz.
Juice of poke berries,	4 oz.
French brandy,	2 quarts.

Pulverize all the solid ingredients, and digest them ten days in the brandy, shaking it every day. Dose, one table-spoonful three times per day. Valuable for rheumatic complaints.

RHEUMATIC DECOCTION.

Take of,	
Virginia snake root,	1 oz.
White pine bark,	2 oz.
Burdock seeds,	2 oz.
Prickly ash bark,	2 oz.

Pulverize all the articles, and add a half gallon of water; boil down to three pints. Dose, a half pint, two or three times a day. This forms an excellent decoction in chronic rheumatism.—[*American Practice.*]

CURE FOR BALDNESS.

Take of,	
Lobelia seeds,	8 oz.
French or peach brandy,	1 pint,
Sweet oil,	1 "

Put the pulverized seeds in a bottle, and then add the brandy and oil. Let it stand four or five days and it will be ready for use. Bathe the head once a day with this liquid and it will prevent the loss of hair; and in some instances it has restored it when lost.

CARMINATIVE DECOCTION.

Take of,

Dewberry brier roots,	4 oz.
Burdock roots,	4 oz.
Wild cherry, inner bark,	4 oz.
Sassafras, inner bark,	4 oz.
White ash, tops,	4 oz.

Bruise all these articles well, and boil them in a gallon and a half of water down to three quarts; then add one pint of brandy, and one ounce of the oil of peppermint. Dose, a half gill three times per day. Valuable to cleanse and renew the blood; also good for nervous colic, night mare, dyspepsy, &c.

FOR FITS.

Take of,

Mistletoe, of white oak;	4 oz.
Star roots,	4 oz.
Rum,	1 quart.

Pulverize the solid articles, and digest ten days in the rum. Of this tincture take a table-spoonful three times per day; and take at the same time, a tea-spoonful, of the pulverized mistletoe in a little honey three times a day also. Valuable for epilepsies, fits, palsies, and convulsive disorders generally.

FOR WORMS.

Take of,	
Juice of roasted onions,	2 oz.
Melasses, or sugar,	1 oz.
Aloes,	4 grains.

Mix all together:—Dose, one tea-spoonful every hour or two, until relief be obtained. Valuable for worms.

TONIC TINCTURE.

Take of,	
Wild cherry, inner bark,	4 oz.
Yellow poplar, inner bark of the root,	4 oz.
Dog-wood, inner bark of the root,	4 oz.
Sarsaparilla roots,	4 oz.
Brandy,	$\frac{1}{2}$ gallon.

Pulverize the solid articles, and put them in the brandy. This tincture, used freely every day, is good to cleanse the blood and improve the appetite;—valuable in some cases of dyspepsy.

FOR CONSUMPTION.

Take of,	
Hoarhound,	4 oz.
Sage,	4 oz.
Mullen,	4 oz.
Heart-leaves,	4 oz.
Ground ivy,	8 oz.
Feather-few,	4 oz.
Hyssop,	8 oz.
Potmargery,	4 oz.

Bruise all the articles well in a mortar; then pour on them a pint of clean water, to moisten them. Let them remain a few minutes, pressing them down well in the water; then press out the juice thoroughly, and add of

Peach brandy,	1 pint,
Honey,	1 quart,
Brown sugar,	1 lb.
Fresh butter,	1 lb.

Stew all together down one half. Dose, a tablespoonful, three times a day, living on light diet. Valuable for coughs, phthisics, consumptions, &c.

FOR WHITES OR FLOUR ALBUS.

Boil the hulls of white oak acorns in new milk, and drink freely of it through the day, taking a pill of tarptentine every night, giving one or two injections of the ooze of red oak bark, each day. The patient must live on cooling, light diet, avoid exposure to cold, damp, air, and guard against over-heating, or over-straining herself. Valuable for the flour albus or whites.—[R. C. of Ky.]

FOR THE CONSUMPTION.

Barn young hickory saplings on a clean hearth; and of the ashes make a weak lye; bottle it up, and commence taking it in new milk, three times per day. As the patient gains strength, increase the strength of the lye. This has done wonders.—[Idem.]

FOR COLDS, COUGHS, &c.

Take of,	
Common elder, flowers,	6 oz.
Calamus root,	3 oz.
Race ginger,	3 oz.

Pulverize all these articles, and boil them in a gallon

of water down to a quart; then strain and add $\frac{1}{4}$ pound brown sugar, one pint of honey, and one pound fresh butter. Stew all down to a quart. Dose, a table-spoonful two or three times a day. This is a good medicine for a cold, and for a cough approaching a consumption; also excellent for any complaint of the lungs or breast.

FOR DROPSY.

Take of,	
Mustard seeds,	1 lb.
Horse-radish root,	2 lbs.
Chips of lignumvitæ,	1 lb.
Indian hemp roots,	8 oz.
Good cider,	2 gallons.

Bruise the solid articles well, and then put them in the cider, and simmer them down to one gallon;—strain and bottle for use. Dose, a wine-glassful four times a day, for a few days, then let the patient use some tonic medicines, a day or two, and again resume the use of the other. This is a most excellent remedy for dropsy.

MIXTURE FOR CHOLERA.

Take of,	
African cayenne,	1 oz.
Xanthoxylon,	1 oz.
Race ginger,	2 oz.
Golden seal,	1 oz.
Lady's slipper,	1 oz.
Hemlock bark,	1 oz.
Bayberry,	1 oz.

Pulverize all the articles, and put them in a small bag; boil them in one gallon of water down to two quarts, then add,

Orleans melasses,	1 gallon,
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Good 4th proof rum,	$\frac{1}{2}$ do.
Tincture of myrrh,	3 pints.

Mix well and bottle up for use.—Dose, one table-spoonful three or four times per day, or oftener, if circumstances require it. Valuable for bowel complaints, as dysentery, diarrhea, &c. and if properly used in time is almost a certain preventative of the spasmodic cholera.—[Haxton.]

FOR DEAFNESS.

Take of,	
Peach kernels, pulverized,	1 oz.
Fresh butter,	8 oz.
Garlic, two small pieces.	

Stew all together slowly, stirring it well until it becomes a pure oil; then strain off the oil. Drop a few drops of this oil in your ear, three or four times per day, for three or four weeks, keeping your ear well stopped with black wool, moistened with the same. This generally gives relief, where the deafness is not produced by some material defect in the organ. Persons quite deaf have been cured by this treatment.

FOR CONVULSIONS.

Take of,	
Angelica,	4 oz.
Sassafras, bark of the root,	4 oz.
Russian caster,	1 oz.
Cinnamon bark,	1 oz.
Jamaica rum,	1 quart.

Pulverize the solid articles, and put all into an oven covering it very close, and simmer it on embers, down one half. Dose, a table-spoonful three times a day. This course, continued for some length of time, the patient living on light, nourishing diet, and avoiding ex-

posure in any way either to heat or cold, or fatigue, generally succeeds in effecting an entire cure of convulsive fits. The patient should continue taking the medicine for some time after the fits disappear, in order to guard against their return.

CHOLERA SIRUP.

Take of,	
Blue cohosh,	1 lb.
Lady's slipper,	1 lb.
Golden seal,	1 lb.
Bayberry,	1 lb.
Hemlock bark,	1 lb.
Cayenne,	4 oz.

Finely pulverize all the articles, and boil them in four gallons of water down to six quarts, strain off the decoction, and add of,

Loaf sugar,	6 lbs.
Antispasmodic tincture,	1 gallon.

Mix well together, and bottle up for use. Dose, a table-spoonful, three or four times per day, or oftener if the case require. This sirup is good for dysentery, diarrhea, &c.; and in the early stages of the spasmodic cholera, if used freely it, rarely fails to arrest its progress, and effect an immediate cure.

ANOTHER FORMULA.

Take of,	
White sumach,	1 lb.
Bayberry,	1 lb.
Golden seal,	1 lb.
Butternut, inner, green bark,	1 lb.
Hemlock, inner bark,	1 lb.
Lady's slipper root,	1 lb.
Cayenne,	2 oz.
Pearlash,	2 oz.

Pulverize all the ingredients, and boil them in four gallons of water down to one; then strain, and add four quarts melasses, and four quarts of antiseptic tincture, and bottle up for use. Dose, from one to two table-spoonsful, two or three times a day, or oftener if the urgency of the case should require it. This sirup is valuable for the same that the above one is recommended.

TINCTURE OF MYRRH.

Take of,	
Gum myrrh,	12 oz.
Cayenne,	$\frac{1}{2}$ oz.
Alcohol,	2 quarts.

Pulverize all the solid articles, and digest them in the alcohol ten days in a sun heat; shaking and stirring it well every day; then let it settle, and pour off, and bottle up for use. Dose, from one to two tea-spoonsful, repeated as often as the case requires. This tincture is not of such general utility as a family medicine, as the one we have described, under the name of Diaphoretic tincture; yet there are some cases where it is better than the other, being a more powerful medicine to resist putrescence.

FOR WHOOPING COUGH.

Take of,	
Sweet oil,	1 gill,
Honey,	$\frac{1}{2}$ pint,
Vinegar,	$\frac{1}{2}$ pint,

Simmer all together one half hour. Dose, a tea-spoonful or two, repeated as often as circumstances require. This preparation gives relief in the whooping cough.

FOR INFLUENZA.

Take of,	
African cayenne,	$\frac{1}{2}$ oz.
Good vinegar,	$\frac{1}{2}$ pint,
Water,	$\frac{1}{2}$ pint,
Honey or sugar,	$\frac{1}{2}$ lb.

Mix, and simmer together fifteen minutes.—Dose, one table-spoonful, which will generally relieve the cough; if it becomes troublesome again repeat the dose.
—[J. S.]

FOR DROPSY, GRAVEL, &c.

Take of,	
Elder, bark of the root,	1 peck,
Wild cherry, inner bark,	1 peck,
Sassafras, bark of the root,	2 pecks,
Horse-radish roots,	4 pecks,
Sarsaparilla,	4 pecks,
Bog-wood, bark of the root,	2 pecks,

Dry, and finely pulverize all the articles; put them into a barrel, and add twenty gallons of boiling water; let it stand where it will keep warm until it works well, and settles;—pour off and strain; then boil down in an iron pot to ten gallons;—keep it warm until it works, then boil down to five gallons—keep it warm till it works as above; boil down to one gallon, and let it work again. By this time, this decoction has become very acid, and is valuable, for consumption, dropsy, gravel, epilepsy, palsy, fevers, pleurisy, and poison. Dose, a half table-spoonful to a table-spoonful. The use of this medicine daily, in the time of the prevalence of an epidemic, is a powerful security against its attack:—it is also a security against injury from the change of climate.—[R. C. of Ky.]

LAXATIVE TONIC.

Take of,	
Rhubarb, pulverized,	2 oz.
Sugar,	2 oz.
Whiskey,	1 pint,
Cinnamon, pulverized,	1 oz.

This article is valuable for summer complaints among children, administered in small doses, often repeated.

EMMENAGOGUE TINCTURE.

Take of,	
Vervine roots,	1 lb.
Sweet modley,	1 lb.
Camomile flowers,	1 oz.
Elecampane roots,	4 oz.
Brandy,	3 quarts.

Pulverize all the solid articles, and digest them ten days in a hot sun heat, and it is ready for use. Dose, from half to a table-spoonful three times a day. This medicine is valuable to remove obstructions of the menses; but it is more particularly reputed for its efficacy in relieving after pains, child-bed fever, nervous colic, &c.
—[R. C.]

FOR WHITE SWELLINGS.

Take of,	
Water oak, inner bark,	4 oz.
White pine, inner bark,	8 oz.
Persimmon, inner bark,	6 oz.
Sour dock roots,	6 oz.
Elder, bark of the roots,	6 oz.
Dewberry brier roots,	4 oz.
Red oak, inner bark,	4 oz.

Take all these articles in a green state, bruise them well, and boil them in water until the strength is extract-

ed; then strain and boil down slowly to the consistence of tar. This makes a salve both cleansing and healing, for cancers, ulcers, sore legs, white swellings, catarrhs, &c. If the ulcer to which you wishto apply this salve be hollow, dilute a little of it with water, and syringe into it, and also apply a plaster of it externally.—[R. C.]

FOR CONTRACTED JOINTS.

Take of,	
Bitter sweet, bark of the roots,	4 oz.
Cayenne,	4 oz.
Jamestown leaves,	4 oz.
Tansey,	4 oz.
Camomile flowers,	2 oz.
Horse radish roots,	8 oz.

Pulverize, or bruise all these articles, and boil them in water until their strength is extracted; strain the decoction into a clean iron vessel, and add one quart of rum, or proof whiskey, one pound of fresh butter, [un-salted,] a quart of red fishing worms, a pint of neat-foot oil, and a spoonful of saltpetre. Stew all together slowly until it becomes an oil; then bottle up in well stopped bottles. This ointment is valuable for rheumatic or sciatic pains, and to give elasticity to the muscles, sinews, &c. in cases of chronic contractions, and stiff joints.

RHEUMATIC OINTMENT.

Take of,	
Mustard seed,	4 oz.
Cayenne,	4 oz.
Sassafras, bark of the root,	4 oz.
Camomile, flowers,	4 oz.

Pulverize all these articles, and boil them in water.

until the strength is extracted; strain the decoction into a clean iron vessel, and add of,

Sweet oil,	$\frac{1}{2}$ pint,
Proof spirits,	$\frac{1}{2}$ pint,
Fresh butter,	4 oz.

Simmer these down slowly to an oil, and then add a half ounce of pennyroyal oil, stirring them all well together. This ointment is valuable for rheumatism, and for pains generally; also for pleurisy, spasms, broken bones, and pains occasioned by mercury. It should be rubbed on warm, before a fire.

RHEUMATIC LIQUID.

Take of,	
Prickly ash bark,	4 oz.
Unicorn root,	4 oz.
Blood root,	4 oz.
Sea ash bark,	4 oz.
Bitter sweet, bark of the root,	6 oz.
Rattle root,	6 oz.
Burdock roots,	6 oz.
Bear's foot roots,	6 oz.
French or peach brandy.	1 gallon.

Pulverize all the solid articles, and digest them ten days in the brandy, in a hot sun heat; then filter and bottle up for use. Dose, one table-spoonful, three times per day. This is a valuable medicine to take internally for rheumatism, while using externally some proper application, whether, cataplasm, plaster, salve, or ointment.

RHEUMATIC OINTMENT.

Take of,	
Smart weed,	2 lbs.
Skunk cabbage leaves,	2 lbs..
2 F*	

Cayenne,	4 oz.
May weed, flowers,	8 oz.
Hog's lard,	2 lbs.

Bruise the solid articles, and stew them in the lard until the strength of the articles is extracted; then strain and press out the oil, and it is ready for use. Bathe the affected part twice a day, rubbing it in well at each bathing, then cover the part with a warm piece of flannel.

ANOTHER FOR THE SAME.

Take of,	
Bear's foot roots,	2 lbs.
Elder, bark of the root,	2 lbs.
Black sumach, bark of the root,	2 lbs.
Young pine roots,	2 lbs.
Cayenne,	8 oz.

Pulverize or bruise all the articles, and boil them in water until the strength is extracted; strain the decoction into a clean iron vessel, and then add, a quart of dog's oil, a pint of unsalted butter, a pint of red fishing worms, a pint of turky buzzard's oil, and an ounce asafoetida;—stew all these slowly down to an oil, then let it cool, and add a vial of opodeldoc, and two ounces of the oil of hemlock; then stir all well together. This ointment has been successfully used for palsy, gout, rheumatism, stiff joints, deadnes or stiffness in the limbs, white swellings, pleurisy, &c. Rub this ointment on before the fire, bathing it in well, and then cover the affected part with warm flannel. Some people may affect a smile at some of the articles recommended in this recipe; but we were of the opinion that whatever is truly valuable to conquer disease, and secure health, ought to be known and used.—[R. C.]

VERMIFUGE POULTICE.

Wormwood finely pulverized and made into a poultice with beef's gall, and applied externally to the navel of wormy children, will expel the worms.

ANTISEPTIC POULTICE.

Take two pounds of cat-tail flag roots; bruise them well, and boil them in two gallons of water down to one, then thicken with wheat bran to a proper consistency for a poultice. This poultice is good for bruises, strains, risings, and inflamed or mortifying parts. Putrid fevers, that seemed to defy the power of the usual remedies, readily yielded to proper internal remedies, by wrapping the patient up in the above poultice, made large enough to cover the whole body, and renewing it two or three times a day.

CLEANSING BEER.

Take equal parts of burdock, sarsaparilla, and spike-nard roots, as much as can be boiled in six quarts of water; boil it down to two quarts; strain off, and when a little cooled, add a pint of molasses, or half a pound of sugar, with yeast enough to work or ferment it. As soon as the fermentation commences, begin to drink, and continue drinking freely until it is all drank; continue making it fresh and drinking every day, until health is restored. This is a good article for purifying the blood, and may be used in all cases of vitiated humors.
—[E. Stedman.]

DOSES OF MEDICINE.

THE quantity of medicine to be taken at a dose, in this work is generally calculated for adults, unless otherwise stated. We add the following rule for graduating the dose for children.

For a youth of 15 years old, the dose is about $\frac{1}{2}$ of an adult's dose.

For one of 10 years old, the dose is about $\frac{1}{2}$ the dose of a grown person.

For one of 5 years old, about $\frac{1}{3}$ the dose of a grown person.

For one of 2 years old, about one sixth the quantity.

For one of 1 year old, about one tenth the quantity.

These doses however, will often have to be either enlarged or lessened according to the constitution of the patient, and the effects produced. The great object should be to give enough to produce the desired effect; and yet not to give more than is necessary.

WEIGHTS AND MEASURES.

It will perhaps be necessary that we give a table of weights, and measures for the benefit of some of our readers.

WEIGHTS.

20 grains, make	1 scruple,
3 scruples, "	1 drachm,
8 drachms, "	1 ounce.

In general, one tea-spoonful of powdered roots, or barks, will make 20 grains or one scruple; some, however, will make more, and some less, as some are specifically heavier than others.

WEIGHT OF FLUIDS.

1 fluid drachm, measures about a tea-spoonful.

3 fluid drachms, measure about a desert-spoonful.

5 fluid drachms, measure about a table-spoonful.

8 fluid drachms, or one ounce, is one fourth of a gill.

4 fluid ounces, make a gill.

16 fluid ounces, make one pint.

FLUID MEASURE

4 gills, make

1 pint,

2 pints, "

1 quart,

4 quarts, "

1 gallon.

Should any one wish to be exact about the quantities in compounding or administering medicines, he can purchase a graduated glass for measuring fluids, and small scales for weighing solids.



PART III.

CONTAINING,

A DESCRIPTION OF THE SYMPTOMS OF DISEASE, AND THE METHOD OF TREATMENT.

IN giving a description of the symptoms of disease, or the various aspects under which it makes its appearance, we shall labor to do it in both a concise and comprehensive manner, confining ourselves principally to those complaints which are most common in our country, and peculiar to our climate, leaving foreign diseases to the care of foreign physicians. Every family ought to be instructed in the method of curing their own maladies; and for this purpose we have endeavored to simplify the "*HEALING ART*," so that any family, possessing an ordinary share of common sense, may become their own physician in most cases of disease, without the hazard of making the hold of disease stronger, or the power of life weaker. This security arises principally from the safety, and efficacy of the remedies herein recommended, and the simplicity of the method of preparing and administering them.

As the term "*course of medicine*" will frequently occur in the following part of this work, we shall here describe it in full.

COURSE OF MEDICINE.

CARRYING a patient through a course of medicine, includes the application of the '*vapor bath*' to promote a free

perspiration; the administering of an emetic to cleanse the stomach; injections to evacuate the contents of the bowels, or the administering a cathartic to answer the same purpose. As the efficacy of each of these parts of the course of medicine, is more or less affected by the manner in which it is done, we shall here describe each one under its proper head.

VAPOR BATH.

Practitioners have devised various methods for applying the vapor bath; but we have recommended the following simple method, because the means of effecting it are to be had in every family.

First kindle up a good fire, into which throw six or eight rocks, and let them heat nearly to redness. Have a kettle of boiling water; and before the patient enters the bath, let him take two or three doses of some warming or diaphoretic tea. A tea of diaphoretic powders is perhaps the best, which may be prepared thus; on a tea-spoonful of the powders pour about a third of a tea-cupful of boiling water, and when cooled enough to drink, take it at a dose; but if the diaphoretic powders are not at hand, any warm aromatic tea may be substituted, such as ginger, pepper, pennyroyal, mint, balm, &c. About a fourth of a tea-spoonful of cayenne, should be added to each dose of tea. This being done, proceed to apply the vapor bath. If the patient is able to stand during the process, the most convenient mode of applying it, is to strip him and wrap him in a blanket, letting the blanket reach the floor. Then put a pot or oven under the blanket, near the patient with one of the hot stones in it; then pour the hot water out of the kettle on the rock until it is about half covered. This will produce a lively steam, which being confined by the blanket, rises up about the patient, producing a free perspiration. When the rock becomes too cool to raise a lively steam,

turn it over, and when the other side becomes too cool, take it out, and supply its place with another hot rock; and when that one becomes too cool to keep up a lively steam, remove it also, and supply its place with another; thus continue until the patient has been long enough in the bath, which is usually from ten to twenty minutes. But if he is not able to stand, let him sit in a chair, having his clothes off and a blanket or coverlet around him as above. In this case it will be best to have two ovens with rocks in them, one immediately before the patient and the other behind his chair, letting the blanket extend over each, and managing the rocks in both so as to keep up a lively steam, in the manner above directed. If the weather be cold, the patient should have his feet on a warm board, or what would be better in a vessel of warm water. It will be necessary when applying the vapor bath in this way, to place a chair, with the top leaning over toward the patient, immediately before him, so as to support the blanket and keep it from laying immediately on the vessel containing the water; or if preferred, you may use a couple of small poles for this purpose, by tying the upper ends of them to the tops of the posts of the chair on which the patient is to sit. If at any time you should happen to make the steam too hot, temper it by raising the lower edge of the blanket, and letting in the cool air. Let the patient have a drink of cool water at any time he may desire it during the process of steaming. If the patient should become feeble or faint, before he has been long enough in the bath, give him a sup of cold water, and if that does not relieve him, pour a little on his head, or dash it in his face and bosom. Let the patient drink plentifully of the warm teas recommended above, during the whole time he is in the bath, as well as that directed before he enters it; the observance of this direction is necessary both to the greater efficacy of the bath, as well as to its greater safety, being less apt to make the patient sick, if the internal heat be kept up higher than the external.

After the patient has been long enough in the steam or vapor bath, he should be hastily washed all over, and rubbed with a towel or cloth to cleanse the skin of the feculent matter that has been thrown on the surface of the skin by transpiration; or the skin may be cleansed by wetting a cloth in vinegar and rubbing the body well all over with it:—in diseases, where putrescence is very prevalent, this last method is generally the best. This being done, the patient must be put immediately in a warm bed; and the perspiration must be kept up by giving him warm teas to drink; and by putting a warm rock wrapped in wet cloths to his feet.

If the patient be unable to stand or sit, in the vapor bath, it may be applied to him while in bed. To do this you must place the bed-clothes over the patient in such a manner as to let the vapor pass freely about the body of the patient, and then convey the vapor from the oven under the clothes. With proper care and attention, the patient may be sweated very well in this way; but it is neither as convenient, nor as valuable as the above described methods of standing or sitting. A person may also be sweated by placing warm rocks or bricks about him in the bed; and drinking freely of some diaphoretic teas. When a patient is sweated in this way, the rocks should always be wrapped in wet cloths to make the vapor moist; for a dry steam or vapor is not so valuable for sweating, as a moist one. Remember that in all cases, when you sweat a person to make him drink freely of some diaphoretic or sweating tea; for it is important to keep up the internal heat higher than the external, not only for the sake of keeping the patient from becoming faint or sick, but also for the sake of securing the greater benefit from the process. You would do well to mix a little of the diaphoretic tincture with the teas given to the patient during the process of receiving the vapor bath, or he may drink the tincture alone.

Children may receive the benefit of the vapor bath by being held in the lap of some grown person, and let the blanket be around them both, giving them some warming

teas to drink as above directed for adults. The person holding the child must judge of the temperature of the vapor; for you must recollect that a child can not bear as warm a bath as a grown person can.

Although the value of the vapor bath, both in preventing disease, and in restoring health, was early known, and often recommended; yet their use had been much neglected in most countries, until their value was but little known. Dr. Thomson, the great reformer in the practice of medicine, has revived their use in the United States; and now, many are astonished, that a means so simple, safe, and efficient, should be so little used by those who seemed to claim the exclusive right to cure men's diseases. Its neglect, however, is attributable to the fact, that the proud dignity of *affected learning*, can never deign to stoop down to the use of a means so simple that every patient can understand its use:—that would be rending the veil of mysticism, which learning has ever contrived to throw around the '*healing art*.'

We have heretofore shown that disease proceeds from obstruction; that when the secretions and excretions do not progress with healthful activity, a diminution of the living power must be the necessary consequence; and that when perspiration is obstructed, or even retarded, the wheels of life become clogged with useless, morbid matter, which always proves a fruitful source of irritation to the organs. As a necessary consequence, the fluids become thicker and more viscid. This prevents their circulation with the requisite facility through the capillary vessels; and this increases the load and oppression, under which the struggling energies of life, are already laboring. This causes pain, soreness of the flesh, head-ache, lassitude, debility, aversion to muscular motion or exertion, &c.: the surface of the muscles, and all the internal viscera, are not sufficiently moistened with the fluids which soften and lubricate their surfaces, as they are in a healthy state of the system. But the use of the vapor bath, acts as a stimulus, adding vigor to the living power; and attenuates or thins the various

fluids, promoting the secretions and excretions, thus the useless, worn out, morbid matter is thrown off, and all the functions assume their usual activity; and a healthy vigor regains its empire over the frail system.

The testimony of many eminent men, and the practice of the Russians, and some other Europeans, might be adduced to show the efficacy and value of the vapor bath, in subduing disease and promoting health; but we deem it unnecessary at this place.

The vapor bath may be advantageously used in most violent cases of disease; in all cases of cold and obstruction; in all cases of fall and bruises it is a most certain remedy; in cases of suspended animation it may be employed with great advantage, by beginning with a very gentle steam, and pouring in diaphoretics to raise the internal heat; and minding to keep the internal heat the highest. Severe attacks of disease may be broken at once by the proper use of the vapor bath.

In general, the vapor bath should be followed by the cold bath, which is given by dashing on the shoulders about a half gallon of water; and then rubbing off the patient with a towel and putting him immediately in a warm bed. This part of the process does not feel very pleasant; but experience abundantly confirms its utility. It braces and strengthens the system; and if done expertly does not check the perspiration. The use of the vapor bath is a great preventative of sickness when so managed as not to let the person take cold after it by cooling off too quick. If used once a week in low, sickly countries, during the sickly season, and during the prevalence of an epidemic it would keep the system in such a healthy pure state, by throwing off the seeds of disease, that there would be but little danger of an attack. The planters of the Southern states, who generally have large families, would do well to have some convenient place for receiving the vapor bath prepared, and then but little time would be lost in employing this powerful means of preventing disease. The Russians have long employed the vapor-bath with great success,

as a preventative of disease. They always take the cold bath immediately after the vapor bath; then rub themselves dry, and go about their business. No persuasion whatever, could induce them to discontinue a practice from which they derive so much benefit; viz: security from the attacks of disease, and a healthy, vigorous constitution.

ADMINISTERING AN EMETIC.

After the patient has come out of the vapor bath, and is placed in a warm bed it is then the proper time to administer an emetic, if you intend taking him through a course of medicine. For emetics, we refer the reader to that class, both in *materia medica*, and in the dispensatory; but the lobelia in some of its preparations, is the article we would recommend as the best emetic. The pulverized seeds are commonly preferred, as being the most active. The necessary quantity to produce full vomiting, varies in different individuals, and even for the same individual at different times. In most cases, however, you may begin by administering a half a tea-spoonful of the pulverized seeds in a half gill of warm water, or in some diaphoretic tea, adding a tea-spoonful of cayenne, and a tea-spoonful of lady's slipper. After this is swallowed, drink freely of the tea of diaphoretic powders, or of a tea made of pennyroyal, mint, &c. or some warm aromatic tea. Repeat this dose every ten or fifteen minutes, increasing the quantity of lobelia each time, until vomiting be produced. In the class of emetics among the compounds, the reader can find directions how to prepare emetics; and if he should prefer them, he may use any one that is there recommended, for the purpose therein mentioned. Should the patient have a sour stomach, he ought to take an emetic of the kind recommended in the dispensatory for that purpose; if he does not, the ordinary emetic will work slow and difficult. The emetic should be worked off by drinking.

freely of some warm tea; gruel, or even warm water:—this not only renders the operation easier, but more effective also.

The pulverized leaves and pods, may be given in the same manner as the seeds; but the dose must be somewhat larger. Begin with a heaping tea-spoonful, and repeat the dose every ten or fifteen minutes, increasing it every time, until vomiting be produced. Worked off as above directed. We deem it superfluous to add anything more on this subject, at this place, as we have had occasion to speak of it, both in *materia medica*, and in the dispensatory.

ADMINISTERING AN INJECTION

Sometimes it is deemed expedient to administer an injection, after the patient comes out of the vapor bath, before administering an emetic; but in general, the proper time to do it, is after the emetic has operated. So much has been said about the preparation of injections, under the proper head in the dispensatory, that it would be entirely unnecessary to add any thing further at this place; and as to the method of administering, almost any old man or woman in the country knows enough about it to render a particular description of it unnecessary, so we shall refer the reader to the head injections, page 361, for any further information he may want on the subject.

ADMINISTERING A CATHARTIC.

Many practitioners deem it proper to give a cathartic to the patient in time to be done operating before, he enters the vapor bath. In some cases, as dropsies, liver complaints, jaundice &c., this course may be proper; but in most cases if a motion of the bowels be required, an injection will not only operate quicker, but will have

a more salutary effect. It only requires a little experience on the subject to convince any one, that generally speaking, injections have a more salutary effect than cathartics; yet in the face of these facts many practitioners, administer cathartics instead of injections. We presume it is because the one is less troublesome than the other, and less an offence against modesty; but should we stand on punctilio when the health and life of the patient is at stake! especially when no exposure is necessary, and nothing to do, but what the friends of the patient can do.

But if a cathartic be administered to open the bowels, and evacuate their contents, the patient, especially if feeble, should drink freely of some nourishing soup, broth, porridge or gruel, to sustain the powers of life, and prevent that exhaustion which most cathartics are apt to produce. As to the quantity and kind to be used, we refer the reader to what has been said on this subject, both in *materia medica*, and in the dispensatory.

THE COLD BATH.

Having mentioned the use of the cold bath in our remarks on the vapor bath, it would perhaps be improper to pass the subject without any further notice. The cold bath may be advantageously employed either topically or generally; and is applied either by pouring water on the body or some part of it, or by immersing the body in water and coming out immediately, and rubbing the skin dry with a towel or coarse piece of cloth. The cold bath, properly applied, is a very considerable tonic and bracer of the system, tranquilizing nervous irritability, exhilarating the spirits and increasing the tone of all the organs. This is what renders its use after the vapor bath so advantageous. Many persons unacquainted with the effects of the cold bath, view its use after the vapor bath with great astonishment and even horror.

But they may be assured that when expertly and properly applied, it braces and strengthens the relaxed organs, restoring them to their proper tone, and operates as a preventative of taking cold. Topical bathing, which means pouring cold water on some particular part of the body, is often used with great advantage in cases of head-ache, rheumatism, sprains, local inflammations, burns or scalds; in this last mentioned case, it is generally an easy and infallible remedy, when properly managed;—for the proper management, see “*burns and scalds*” in the treatment. When a person uses the cold bath in any form, either general or topical, and does not feel, immediately after being rubbed dry with a coarse towel, a pleasant glow and increase of heat, in the part bathed, it is an indication that the use of the cold bath will not benefit him; and its further use ought not to be continued, as injury instead of benefit would be likely to result from its use, under such circumstances. The want of room, will compel us to omit any more remarks on the method of employing the cold bath, or the benefits resulting from its use, at this place.

THE PULSE.

This is perhaps, the proper place to introduce a few remarks on the pulse, showing in some degree, how a knowledge of it, may assist in judging of the nature of the disease. By the PULSE is meant the beating or throbbing of an artery, which is occasioned by the motion of the heart in propelling the blood through them. In a healthy person, when not agitated in any way, this motion is very regular; and amounts to more than four thousand motions in an hour. When the artery runs near the surface, as at the wrist, temple, &c., its motions are very perceptible. The pulse in different persons varies, yet the usual standard of a healthy indication by the pulse, is from sixty-five to eighty strokes in minute:

—in children the motion is quicker; in aged persons it is slower and weaker. Exercise, or any of the enlivening passions, as joy, hope, &c., increase the motion of the pulse; and fatigue, or any of the depressing passions, as fear, grief, &c., the want of food, frequent stools, &c., diminish the motion of the pulse. In feeling the pulse, allowance must be made for these things.

1. When the artery resists the pressure of your finger, feels full, and swells boldly under the pressure, it is called full, strong, tense pulse:—if slow and fluttering, it is called a weak irregular pulse.

2. When the artery feels like a tight drawn string, giving considerable resistance to the pressure of your finger, it is termed a hard, corded pulse.

3. When the pulse is soft and intermitting, it indicates great weakness of the system and a languid circulation.

4. Oppression of the stomach and bowels, or an agitation of the mind, often produces an intermitting pulse. A vibrating pulse, with quick, weak pulsations, indicate a dangerous state of disease; and is generally accompanied with difficult breathing, and a heavy languor of the eye. These remarks, connected with what will be said in the description of the symptoms of disease, are deemed sufficient to enable any one, so far as the pulse can give any indications, to judge of the nature and stage of the disease.

REMARKS ON FEVER IN GENERAL.

FEVER and febrile diseases, from an early period down to the present day, have been the fruitful theme of speculation. Theory has been piled on theory, proposing to point out its causes both remote and proximate, and to explain its nature:—system after system has been offered, proposing to cure it; yet febrile diseases continue to be the great outlet of human life, and are generally in the hands of the ‘faculty’ as fatal as they were in the days of Sydenham, Galen or Cullen. Says, Dr. Ho-

sack, an eminent physician of the old school, "Eight out of nine of all who die, are cut off by febrile complaints." A convincing proof this, that however learnedly philosophy has endeavored to point out the proximate cause, that has still escaped detection; and however, ingeniously learning has prescribed her remedies, these remedies have still proved uncertain and ineffective in a great degree. Learned theories appear to have been the fatal *ignis fatuus*, that has so long mislead and bewildered the scientific and talented men that have turned their attention to the science of medicine. It was this that introduced systems of practice so contradictory, and so much at variance with the results of sound experience.

We deem the general remarks, made in the first part of this work, in relation to the theory, and causes of disease, both predisposing and proximate, as being all that is necessary in a work of this kind; for it is not so much a knowledge of the theory of disease that people want, as a knowledge of a safe, certain, and effective means of curing it.

Many who envied the success of the Thomsonian principles of practice, have labored very hard, both publically and privately to turn Dr. Thomson's theory of disease in general, and that of fever in particular into ridicule; yet their puerile witticisms have neither made the Thomsonian practice unsuccessful, nor their own successful:—a few doses of envions, sarcastic witticisms, may do a well man to laugh at, but they utterly fail to relieve a sick man of his maladies. We do not entirely agree with Dr. Thomson in his theory of fever; yet we must acknowledge that his theory, whether correct or incorrect, does not materially affect the correctness and efficacy of his practice. He, as we have before remarked, first matured his practice; and then formed a theory, as he thought, agreeably to the prominent features of that practice. And if he should not have been as successful in theorizing, as he was in healing, it could have but little practical influence upon his system, as he had first discovered a safe, and efficient method of curing

disease. And on viewing the almost universal efficacy of the Thomsonian remedies in his own hands, and his unrivaled success in "battling death in its thousand forms," we are constrained to acknowledge the introduction of his system of practice, is one of the most important events of the age; and may be considered the greatest medical improvement ever offered to the world. As highly as we esteem Dr. Thomson as a medical reformer; yet we do not pretend that he has brought his system to the acme of perfection; for that would be more than could be expected from any reformer. He has however, as we think, discovered the true fountain of medical knowledge, whence the pure streams of the healing practice flow. It is our object in the present work to dig away a little of the rubbish, and try to clean out the channel a little wider, that these may flow a little clearer, and a little freer, and thus more people may partake of their healing virtues.

AGUE AND FEVER, OR INTERMITTENT FEVER.

Low marshy counteries and situations, particularly in warm climates, are frequently visited with this complaint. Its attacks are most common in the fall; though it sometimes occurs at other seasons particularly in the spring.

Agues are generally distinguished by names expressive of the periods of intermission between the fits. Those returning every twenty four hours, are called *quotidians*; those returning every other day, are called *tertians*; and those returning every third day, are termed *quartans*.

Any thing that diminishes the living power, may bring on an attack of this disease, as breathing a noxious or vitiated atmosphere; great fatigue; living on diet not sufficiently nourishing; intemperance; grief; great anxiety; exposure to cold; sleeping in low damp rooms,

or on damp beds; wearing damp clothes; long watching or the loss of sleep.

Each paroxysm of this fever is divided into three different stages distinguished as the cold, the hot, and the sweating stage. The cold stage commonly commences with a feeling of languor, debility or weakness; an aversion to motion, and to food; frequent stretching and yawning. The face and extremities become pale; the features shrunk; the skin over the whole body appears constricted or shriveled; and finally a cold chill comes on accompanied by a shivering or a shaking, which lasts ten or fifteen minutes, and sometimes longer; sensibility becomes greatly impaired; the pulse small, frequent and often irregular; and the urine almost colorless. When the chill goes off, the second or hot stage comes on, with a sense of heat over the whole body, accompanied with redness of the face, a dry skin, increased thirst, pain in the head, throbbing in the temples, anxiety and restlessness; the respiration becomes fuller and freer, but is still frequent; the tongue furred; the pulse more regular, hard, and full; and frequently a delirium takes place, if the attack be severe, and the blood determines to the head. In the commencement of the third stage, the intense heat begins to subside, and a moisture breaks out on the forehead, gradually extending over the whole body.

As the perspiration increases, the heat abates, the thirst diminishes, breathing becomes free and full, and most of the functionaries resume their ordinary state, and operation; but the patient is left in a weak and wearied condition. It may be remarked that the symptoms sometimes differ from those here laid down, evincing a more malignant form of the attack; and sometimes a milder one. These remarks, however, are deemed sufficient to distinguish this form of fever from any other.

TREATMENT.

Should the complaint be of a mild form, and the patient be free from any other disease, commence by giving

a dose of the sudorific powders, three or four times a day, adding a tea-spoonful of the tincture of myrrh to each dose; also give a dose of the laxative bitters three times a day. This will tend to promote both the secretions and excretions, which will aid the different organs to regain a healthy action. At night, place at the feet, a warm rock, wrapped first in a wet cloth, with a dry one on the outside of it, giving at the sametime, a large dose of sudorific powders, with a tea-spoonful of diaphoretic tincture to promote perspiration, and increase the tone of the nervous system. Should this treatment fail, or should the attack be a severe one, employ a course of medicine immediately. I generally commence the course of medicine, just before the chill and shake comes on; and I have never yet failed to effect an immediate cure. If the attack be a very severe one, it may require several courses of medicine to subdue it entirely; but always take the patient through a course of medicine, as often as you do employ it, just before the paroxysm or fit comes on. In the intervals between the courses of medicine, let the patient use three or four times a day, a dose composed of equal parts of the astringent and bitter tonic, which will strengthen both the appetite and the system. You must exercise some discretion whether it be necessary to use the course of medicine every time, just before the chill comes on, or every other time. If the patient can bear it, and the attack be violent, it will be the speediest way to subdue the disease to carry him through a course every time, just before the paroxysm comes on; and if you happen to hit the right time in commencing the course, the patient will escape the fit that day, at least I have found it so in every case that has come under my care. Should the patient complain of great pain in the head, accompanied with restlessness and anxiety, bathe the head with cold vinegar, or even cold water, and occasionally administer doses of nerve powders. If this does not give relief, you must apply the drug poultice to the feet; or if you can not get that, apply a poultice of mustard seeds, or you may apply wilted bur-

dock or cabbage leaves. Keep up a gentle perspiration, and keep the bowels open by gentle aperients, or by laxatives if necessary.

BILIOUS OR REMITTENT FEVER.

This fever is distinguished by the name of remittent, because its paroxysms abate, but do not go entirely off before a fresh one ensues; and it has received the popular name of bilious fever, because in most cases there appears to be an increased secretion of bile. Fevers of this kind are most commonly met with along streams, in the vicinity of marshes, and near stagnant waters. In warm climates where great heat and moisture rapidly succeed each other, remittent fevers of a very malignant character often make their appearance, and sometimes prevail as an epidemic. Persons of relaxed habits, those who undergo great fatigue, breath an impure air, and use unwholesome diet, are most liable to the attacks of this disease. This fever is most prevalent in the latter part of the summer, and in the fall; but it often makes its appearance in the spring.

An attack of this fever is generally accompanied with the following symptoms;—A sense of heaviness and languor, anxiety, pains in the head and back, a sense of heat over the whole body, with alternate chills; the thirst becomes great; breathing difficult; the spirits dejected; the tongue furred; the eyes and skin often appear yellow; the pulse is small and frequent. The situation, and constitution of the patient, season of the year, &c. vary the symptoms so much that it is nearly impossible to give a certain detail of them; but what is above said is deemed sufficient to enable a person of ordinary discernment, to ascertain the presence of this kind of fever.

TREATMENT.

In mild attacks of this disease, when you feel the first approach of the symptoms, take immediate meas-

ures to break the disease, and throw it off entirely. This can generally be done, by drinking freely of some diaphoretic tea, and covering up in the bed, and applying a warm rock to the feet to raise a copious perspiration; but if the stomach be foul, take an emetic also. This course, if pursued in time, will rarely fail to save you of a spell of the fever. But if it should fail, measures more active must be pursued.

Give the patient two or three doses of sudorific powders, repeated at intervals of ten or fifteen minutes, to each of which you must add a tea-spoonful of the diaphoretic tincture. While taking this, let the patient be placed in a warm bed, and have a warm rock placed at his feet to promote a free perspiration; and then give him an emetic of lobelia, making him drink plentifully of some diaphoretic tea to work it off, and promote perspiration; then give a dose of the butternut sirup. If the fever is high and the skin very hot, wet the face, arms and legs with vinegar, or even with cold water; and it sometimes becomes necessary to wet the whole body thus, still continuing the doses of the sudorific powders. The object of this course is to reduce the external heat, and get the internal heat the highest; and there is then but little difficulty to subdue the disease. Simple as this means may appear, it has to my own knowledge a most powerful efficacy. There are but few attacks, of this kind of fever, that will not yield to this treatment. After the fever is broke, give the patient a dose, composed of equal portions of the astringent and bitter tonic powders, two or three times a day, for the purpose of restoring both the strength and appetite. Keep the bowels regulated with injections, or with doses of the butternut sirup.

In cases that have run on so long without resort to the proper remedies, or in cases where the attack is so severe, that the above course will not subdue it, an immediate resort must be had to a full course of medicine. After it, give the astringent and bitter tonic powders, above recommended, two or three times a day: and if

the stools have a dark appearance, and a very disagreeable smell, give a purge of the butternut sirup, to cleanse the bowels. The patient would do well to drink a warm infusion of the slippery elm bark, during the operation of the sirup. Should there be any indication of a derangement of the biliary system, you should administer something to regulate it, as the hepatic tincture, or powders, or some of the articles recommended, as correctors of the bile. This course of medicine must be repeated until the disease be subdued; and then continue the use of the above recommended tonic powders until the strength of the patient be restored. Should there be any symptoms of the presence of nervous irritation, it may be allyed by a dose or two of the nerve powders. If the patient complain of great pain in the head, it may be treated as recommended in the intermittent fever.

Let the patient guard against a relapse, by cautiously avoiding fatigue, and exposure of any kind. Enough nourishing diet should be taken to sustain the living power; but let the patient guard against taking too much, as the craving of the appetite in a state of convalescence is by no means a criterion of the proper quantity.

INFLAMMATORY FEVER.

Inflammatory fever most commonly makes its attacks upon the young and vigorous, who live sumptuously, and are of full habits. It may be produced by exposure to cold, or by cooling off too suddenly when over heated; by high living; by a free use of ardent spirits; by indulging the depressing passions; by obstruction of the perspiration, or by the retention of the customary evacuations.

An attack of this fever is characterized by a sense of lassitude and inactivity, with a wearied, restless feeling, succeeded by a chillness and pains in the head, back, and often in the whole body: the face becomes red; the

pulse quick, full and hard; the skin dry, and very hot; the thirst insatiable; the breathing difficult; nausea at the stomach; the eyes inflamed; the tongue furred on the top, and of a scarlet color on the sides; the urine is red, and voided in small quantities; and the bowels costive. If this disease be not checked immediately, it is often attended with fatal consequences. When the fever runs very high producing delirium, attended with laborious breathing, a flushed, turgid face, red eyes intolerant of the light, starting of the tendons, hiccups, cold clammy sweats, and an involuntary discharge of the urine, it is considered a very dangerous stage of the disease, hardly curable.

TREATMENT.

In attacks of this fever, no time should be lost in resorting to efficient remedies for subduing it at once. This in general may be done effectually by the following treatment: Begin immediately to administer doses of the sudorific powders, at intervals of ten or fifteen minutes, as the stomach can bear, and to each dose add a tea-spoonful of the antiseptic tincture. After two or three doses of the sudorific powders has been given, prepare the patient for the vapor bath, and take him through a full course of medicine. If the patient be able to sit up, strip him and put him on the chair as directed to apply the vapor bath, having a vessel of water, warm as he can bear it to put his feet in:—this water would be better if a little red or white oak bark had been boiled in it, or even a small handful of salt may be thrown in it. If the fever be very high, you will greatly promote the success of your treatment by reducing the fever or external heat quite below the internal heat. This may be done by wetting the face, arms, breast, and even the whole body, with cold vinegar, or if not to be had, with cold water in which a little salt had been dissolved. Continue this wetting until the heat or fever is quite cooled, minding to make the patient drink plentifully of the

sudorific or diaphoretic teas during the whole processs. This being done apply the vapor bath, and carry the patient through a full course of medicine, using in the course an antiseptic injection. Repeat this course every day until the fever is subdued, minding to keep up a gentle perspiration after the patient comes out of the bath; and administering three or four doses a day of the astringent and bitter tonics to sustain the strength of your patient. When the fever is subdued by this course, continue the use of the astringent and bitter tonic, until the patient regains his strength. Keep the bowels regulated by injections or cathartics. With this kind of treatment, taken in time and pursued perseveringly, there is but little danger of loosing the patient:—with this treatment, I have never lost a patient in this fever. Great care must be taken to avoid exposure of any kind; and guard against overloading the stomach, lest you take a relapse.

NERVOUS, PUTRID, OR TYPHUS FEVER.

A fever of this type, in its milder forms is often called nervous fever; and after a short continuance, symptoms of putrefaction occur, from which it has received the name of putrid fever; and lastly, it is often calied typhus fever, from the great debility which characterizes it.

Whatever causes tend to produce general debility, predispose a person to an attack of this fever. Other causes also have their influence in predisposing to an attack of this fever, as a close, humid state of the atmosphere; want of attention to cleanliness, and proper ventilation; effluvia arising from putrid marshes, and decaying animal and vegetable substances; living on improper diet, &c.

On the first approach of this complaint, the person is seized with languor, dejection of spirits, loss of muscular strength, universal weariness and soreness, pains in the head, back and limbs, accompanied with chills; the

eyes appear full, heavy, yellowish, and often inflamed; the tongue is dry and parched; the respiration is generally laborious, and interrupted with sighing; the breath hot and offensive; the pulse is usually small, hard, quick, and occasionally fluttering and unequal; the temporal arteries throb violently, the urine is pale; the bowels costive; sometimes great heat and pain are felt at the pit of the stomach, with a vomiting of bilious matter. If the disease be not immediately checked, it advances rapidly, and the violence of the symptoms increase. The motion of the pulse becomes much more frequent; the debility much greater; the skin very dry and hot; the thirst excessive; the tongue, mouth, lips and teeth are covered with a dark, sticky fur; the breath exceedingly offensive; delirium, with symptoms of putrefaction ensue; the urine deposites a black, fetid sediment; the stools are dark, offensive, and pass off insensibly; bleeding from the gums, nostrils, mouth, and other parts takes place; livid spots appear on the skin; the pulse grows very feeble and intermits; the extremities grow cold; hiccups ensue, and death soon closes this painful scene.

TREATMENT.

When attacked with this disease, no time must be lost, until you resort to efficient means to break it, and throw it off entirely. Indeed this should be your policy in all fevers; but it is especially necessary in this. Several eminent physicians of the old school have recommended the cold bath in the early stages of this complaint; but experience has taught a better method of employing it than ever they knew, or recommended.

Early and strict attention must be paid to the state of the bowels. It would be proper to commence immediately giving the patient a dose of the tea of sudorific powders, which must be repeated every ten or fifteen minutes until he has been carried through a course of medicine. When the patient has taken the second dose of this tea, administer the stimulating tonic injection, and

as soon as it has operated, prepare the patient for receiving the vapor bath. If the fever be very high, and the skin very hot, reduce the external heat by washing the face, neck, arms, legs, breast, and even the whole body if necessary, with a weak lye, pearlash water, or vinegar. Then carry the patient through a full course of medicine, giving in the course the alkaline clyster or injection, (see page 364.) and a cathartic of the black root, (see page 280.) If this course does not break the fever the first time, which it generally does, if attended to in time, you must repeat it every day until it does subdue the disease. Between the courses, administer three or four doses a day of the astringent and bitter tonic powders to sustain the strength and restore the appetite of the patient. Keep the patient in a gentle perspiration by the use of diaphoretics, and by keeping a warm rock at the feet. If the bowels become costive, and the stools continue foetid, give the antiseptic injection. If the fever rises, and the skin becomes dry and hot between the courses of medicine, cool it down with weak lye, or pearlash water or with vinegar, giving the patient a good dose of the sudorific powders before you commence, and one or two during the process. Attend strictly to the state of the bowels, and whilst the foetid, tarry discharges continue, give a cathartic of the black root; and if any symptoms of inflammation appear, use the anti-septic injection. A persevering use of the above course will generally produce a speedy cure. I have had one severe attack of this disease myself; and from experience know that if attended to in this way it may be cured immediately. Guard against any exposure, or any thing else likely to produce a relapse. Keep the room or apartment of the patient clean, and his clothes, as well as bed clothes must be often changed. He must have a plenty of fresh air; but must not be exposed to any current of air. Continue the use of the bitter and astringent tonic until perfectly restored.

SCARLET FEVER.

Children, and young persons are mostly subject to attacks of this disease; yet it sometimes attacks persons of all ages. Scarlet fever often prevails as an epidemic in the fall and winter; but it sometimes makes its appearance in any season of the year.

This fever does not always assume the same character. This diversity of character and symptoms, probably, depends upon the dissimilarity of constitution in the persons attacked; upon the different states of the atmosphere; upon the different seasons of the year, when the attack is made; and upon the difference in the mode of life, habits, &c., of the persons attacked with this complaint.

Like other fevers, this commences with languor, lassitude, chills, heat, dry skin, thirst, nausea, and sometimes vomiting; the pulse is weak and quick, varying from a hundred to a hundred and twenty strokes in a minute. If the disease is suffered to progress, in two or three days, numerous spots of a vivid red or scarlet color, make their appearance about the face and neck; and a similar efflorescence appears over the surface of the whole body in the course of twenty hours after this. In the evening the fever is highest, and the spots brightest. This is the description of the disease in its milder form; but in its more malignant form, there is soreness of throat; inflammation and ulceration of the tonsils; frequent, laborious breathing, and a quick, small, depressed pulse. In this stage of the disease a universal efflorescence or redness spreads over the whole body, with appearance of swelling. When there is a tendency to putrefaction, the pulse becomes small, indistinct, and irregular; the tongue, teeth, and lips are covered with a black fur or incrustation; the cheeks a livid color; the breath foetid; and to these symptoms may be added, great prostration of strength, accompanied with deafness and delirium. This last stage of the disease, is considered very dangerous.

TREATMENT.

In mild attacks, and in the early stages of this complaint, the disease may be thrown off in general, by drinking freely of some diaphoretic teas, and promoting a free perspiration by placing a hot rock to the feet, and giving an injection to evacuate the contents of the bowels; and then give some good tonic to strengthen the system and restore the digestive powers.

It is stated on the authority of Dr. Currie of England, that the simple affusion of cold water, at the commencement and during the hot stage of this fever, will completely subdue the disease, and prevent the efflorescence or red spots from making their appearance. His method was to strip the patient and dash four or five gallons of cold water on him, repeating it as often as the fever returned. He avers that he had tried this method of treating patients on upwards of one hundred and fifty with a success that both surprized and gratified him. We think the efficacy of his cold bath would be greatly increased by giving his patient a few copious draughts of sudorific powders to promote the perspiration; for mind you, if the patient should not sweat after the fever is cooled down externally, the treatment will fail of success.

In all bad cases of this disease, there is nothing so effective as carrying your patient through a full course of medicine, and repeating it until the disease is subdued, and minding to keep up the perspiration between the courses, which ought to be done in all cases; and you must also use the astringent and bitter tonic powders to keep up the strength, and restore the appetite. These powders must not only be used between the courses, but continued until the strength of the patient be restored. If soreness of the throat takes place, you must treat it as directed for putrid sore throat. Keep the bowels regulated by injections;—they are much safer in this fever than cathartics are. Avoid any exposure likely to bring on a relapse.

YELLOW FEVER.

This fever in its present malignant form is not a disease of very ancient origin. The first notice we have of it in the annals of disease, it made its appearance in the year 1647, in the island Barbadoes, one of the West India isles. This fatal scourge of humanity commits its ravages mostly in hot climates, or in the hottest season in temperate climates.

An attack of this disease, is sometimes preceded by a defect of appetite, perverted taste in the mouth, flatulence, heat in the stomach, giddiness, or pain in the head, dejection of spirits, languor, debility, and costiveness. At other times, its attack is sudden, without any previous indisposition, with a chill, pain in the head and limbs, succeeded by flushings of the face, redness of the eyes, pains in the eye-balls, great prostration of strength, and excessive thirst. The tongue becomes coated with a dark colored, tenacious fur; the spittle viscid; the skin hot and dry; the pulse small, quick and hard; the urine high colored, and voided in small quantities. As the disease advances, the eyes and face generally become yellow, which in a short time extends to the chest; the stomach is irritable, throwing up a dark colored matter resembling coffee grounds, called the black vomit. When the disease is suffered to reach this stage, the patient rarely recovers, although in the intervals between his vomiting, he feels so much at ease that he fancies himself speedily recovering. Sometimes, however, the black vomit does not take place; but the patient sinks into a comatose or sleepy state, and dies without a struggle. At other times, putrid symptoms of a very violent character occur, before death closes the scene of suffering.

TREATMENT.

Prompt and efficient treatment should be resorted to in the early stages, or first attack of this disease; for although, the botanic practice has demonstrated the supe-

rior efficacy of its remedies, even in the advanced stages of this disease, yet the better policy is to subdue the disease at once. First cleanse the intestines with the alkaline injection, or with a dose of the black root, though the injection is the safest; for in violent attacks, and advanced stages, cathartics are not as good as properly prepared oysters. Next give the patient the sudorific or diaphoretic teas to drink as directed to do when preparing him for a course of medicine. If the fever be high, and the skin dry, you must allay the heat, and soften the skin, with the alkaline wash, by beginning at the face and neck, then the arms, chest, and even the whole body must be washed, if necessary to allay the heat. This wash may be prepared by making a weak lye, or by dissolving a little pearlash in water; or if you choose you may wash with vinegar. As soon as this is done, carry the patient through a full course of medicine, using in the course the stimulating tonic oyster. Repeat this course every day, until the disease be subdued, if the first course should not subdue it;—mind to keep up a perspiration between the courses, by giving repeated doses of some diaphoretic tea, and keeping a warm rock to the feet. You must also give the patient, three doses a day of the astringent and laxative bitter tonic powders, and continue their daily use until the patient is completely restored. Keep the bowels cleansed by injections, or if there is no great prostration of strength, you may give a cathartic of the black root, or butternut sirup.

Keep the patients room well cleansed, and well ventilated, though you must not suffer him to be exposed to a direct current of air:—change his clothes, and those of the bed frequently, with the necessary precaution to prevent his taking cold. The room may be disinfected by being frequently sprinkled with good vinegar or with the tincture of camphor.

During recovery use caution against eating too much at a time; and avoid any exposure likely to bring on a relapse.

ASTHMA OR PHTHISIC.

This complaint is a spasmodic affection of the lungs, which mostly comes on by paroxysms or fits. It is attended with a short, difficult, frequent respiration, with a peculiar wheezing; there is also a stricture or tightness across the breast, which produces a peculiarly unpleasant sensation. Some have so light an attack of this disease, that they experience but little difficulty from it except when they take cold. Others are never entirely clear of its symptoms. Those who are afflicted with this complaint, experience an increase of the symptoms in the evening, and during the early part of the night. Towards morning the symptoms suffer some abatement; sometimes enough to let the patient get some sleep, but the patient cannot lie down, without increasing the difficulty of breathing, and suffering a sensation similar to suffocation. This complaint is so easily known, that we deem it unnecessary to add any thing more on the symptoms.

TREATMENT.

This distressing complaint has long been numbered with those that could only be mitigated, and not cured; but the introduction of the botanic practice has stripped this disorder of its wheezing terrors, and offered the afflicted asthmatic a relief from this suffocating torture. In the whole compass of medicine there are but two articles yet discovered, that are very useful in this complaint; or deserve any thing like the character of being specifics for it; and these are botanic remedies.

The tincture of lobelia, given in doses of a tea-spoonful twice a day, or the pulverized lobelia given in doses of from half to a whole tea-spoonful, once a day, has been found almost a specific for this disorder. In some cases, the pulverized root of skunk cabbage, administered in doses of a half or a whole tea-spoonful mixed with honey or molasses, and repeated as the symptoms may require, often gives relief, in some kinds of asthma when

the tincture does not effect a cure. It acts both as an expectorant, and anti-spasmodic, which gives it a peculiar advantage in some cases of this complaint; yet in most cases, the tincture of lobelia is the surest remedy. In severe cases of long standing, it will be necessary in addition to the above, to carry the patient through several courses of medicine, at least one a week until a cure is effected. It will be necessary for the patient to make a daily use of some diaphoretic tea during the whole time he is using other remedies. He will facilitate the restoration of health and vigor, by using the astringent and bitter laxative tonic powders; and if his bowels incline to be costive, give him the stimulating tonic clyster occasionally to keep them regular.

APOPLEXY.

Apoplexy is characterized by a sudden deprivation of sense, and cessation of voluntary motion, whilst the heart and lungs continue their regular action. Of this disease, pathologists reckon two kinds, distinguished by the names of the *serous* and *sanguineous* apoplexy: the former arises from a compression of the brain, caused by the effusion of the serum; the latter, from a compression of the brain caused by the effusion of the blood upon that organ. Persons of advanced age, a corpulent habit, short neck and large head, who lead an inactive, sedentary life, or live on full, rich diet, are more liable to an attack of apoplexy than those of the opposite habits. The causes which predispose to an attack of this disease, are intense study, indulgence of violent passions, wearing a tight neck cloth, luxurious diet, hard drinking, large doses of opium, excess of venery, suddenly obstructed perspiration, suppression of urine, and the ordinary discharges.

Sanguineous apoplexy sometimes comes on with giddiness, dimness of sight, drowsiness, loss of memory,

and faltering of the tongue; but most commonly when the person is taken, he suddenly falls down; the face becomes red and swelled; the veins of the head appear full; the eye-lids are half closed, and the eyes fixed and prominent; the pulse is generally full, and the breathing difficult; attended with slight convulsive motions, and grinding of the teeth, in some instances. If the fit continues long, the pulse becomes weak, slow and languid; the breathing grows shorter and shorter, until it ceases, and death closes the scene. Serous apoplexy is generally less severe, and more gradual in its attack; the symptoms however, are similar, except that their violence is greater in the former than in the latter.

TREATMENT.

The annals of medicine present us with various and contradictory modes of treatment, which have been prescribed and pursued for the cure of this disease; but most methods in which depletion forms a part of the treatment, have failed to effect a cure, although temporary relief has sometimes been obtained; yet such treatment seldom obviates a return of the fit, which is then more apt to be fatal.

When attacked with apoplexy, remove every thing from about the neck of the patient, that has any tendency to compress it, or prevent a free return of the blood to the head. Place the body in an erect posture with the feet hanging down. Let no time be lost in administering a stimulating tonic injection, which must be repeated if necessary at short intervals until the bowels are evacuated. Whilst this is doing, let preparations be made for applying the vapor bath to the feet and legs; begin with a moderate steam, and raise it gradually until the patient sweats profusely, wetting the head and temples of the patient during the whole process with cold water or vinegar. If possible, the patient should drink of some sudorific or diaphoretic tea, as in ordinary cases of receiving the vapor bath. As soon as the patient

is taken out of the vapor bath, put him in a warm bed, with the head elevated, and keep up a gentle perspiration. Apply the garlic or mustard poultice to the feet to produce a revulsion from the head; if you have not either of these articles at hand, cut open a live chicken, and apply one half to each foot, which must stay something like an hour. Should it be necessary, repeat this course of treatment; but in general, the patient will be relieved without a repetition, if he do not die in the severity of the first attack. When the patient begins to recover, from the violence of the fit, you may give him a dose of the bitter laxative powders, which ought to be repeated two or three times a day for several days; and he should also take a tea-spoonful of the pulverized mistletoe of America, mix it in as much honey three times a day. By continuing this course, for a week or ten days, a return of the disease, in general, may be prevented, unless the individual should again subject himself to the influence of the exciting causes, which first produced the attack.

BOILS, ULCERS, &c.

When a collection of purulent matter, is formed in any cavity or part of the body, such as boils, and swellings preceded by inflammation, it is distinguished by the name of abscess.

An inflammation which terminates in an abscess, generally comes on with an increased heat in the part, attended with itching, dryness and redness, which symptoms are soon succeeded by a small tumor or swelling, accompanied with shooting, throbbing pains through the inflamed part. If the swelling be large, and the inflammation run high, septic symptoms supervene; the pulse becomes full, hard, and rapid; the skin dry and hot; and the thirst greatly increased. Inflammations of this kind terminate either in suppuration, adhesion, or gangrene.

By the resolution of a boil, is meant, the scattering

of the swelling, the cessation of the inflammation, and the part becoming sound without suppuration.

Suppuration implies the formation of pus or matter in the inflamed part.

Adhesion implies the growing together of the inflamed parts.

Gangrene is the incipient or first stage of mortification.

The formation of pus is indicated by an abatement of the feverish symptoms; a diminution of the acute pain, which is followed by a heavy, dull, cold, and uneasy sensation in the affected part; and if the matter is near the surface, a softness and whiteness is perceptible in the most elevated part of the tumor, whilst the other parts appear more red. But when the matter is more deeply seated, its formation is not discoverable by these last symptoms. In most cases of this kind, when there is a sudden abatement of the inflammatory symptoms, succeeded by repeated chills, with a dull, heavy, cold sensation in the affected part, it may be regarded as an evidence of the formation of matter, and its ripeness for opening. If the tumor be not opened when the matter is formed, and ripe for opening, the patient is apt to be attacked with emaciation, night sweats, and other hectic symptoms.

The symptoms indicating the termination of an inflammation in gangrene are, a sudden diminution of pain and fever; the affected part becomes livid or green; the cuticle becomes detached from the true skin, under which is effused a dirty or turbid water.

TREATMENT.

It would be proper, in the first stage of an inflammation, to attempt a cure by producing a resolution of the inflamed tumor or swelling. Bathing the part with a strong wash of pepper and vinegar, or with bathing drops, will generally effect this. Sometimes the application of cold water has the desired effect; but the surest remedy is the drug poultice. The application of

this poultice will either produce an immediate resolution of the tumor, or if the inflammation has progressed too far before the poultice is applied, it will in a short time, bring it to a head, and produce suppuration.—The application of the common cabbage leaves, or those of the skunk cabbage to the part frequently arrests inflammation and produces a resolution of the tumor.—Cold poultices kept wet with cold water or vinegar often have the same desired effect.

The great object in disorders of this kind is to remove the obstructed or diseased action in the inflamed part, and restore to it, a healthy action. Nothing that we have ever witnessed in the practice of medicine, has so powerful a tendency to clear out obstructions, and remove vitiated humors from the system, as repeated courses of medicine; their use should never be neglected, when the other remedies fail, or when the symptoms indicated the presence of much morbid matter in the system. Should the patient's stomach not be foul; the emetic may be omitted after the first course, using only some strong diaphoretic tea, and the vapor bath.

When a tumor has progressed too far to be terminated by resolution, and shows a disposition to suppurate, poultices should be applied to hasten the suppuration, or as people commonly phrase it,—“bring it to a head.” When ripe, the tumor should be opened for the discharge of the matter. If no pain nor symptoms of inflammation remain after the discharge of the matter you may apply some salve to heal up the place:—see dispensatory, pages, 374, & 375. But if inflammatory symptoms still prevail, apply the poultice, and other remedies above described for reducing inflammation.

Bear in mind that it will be proper in this, as well as all other disorders, when the general health is impaired, to use the bitter and astringent tonic powders, or the tonic cordial, or something to restore a healthful vigor to the system.

Many cases of inflamed tumors, such as the ordinary boil &c, are too unimportant at any stage to re-

quire much attention. In general, nothing more is necessary than the application of some poultice or plaster to "bring them to a head;" then open them and discharge the pus, and they will soon heal up, without giving the patient much trouble.

Should the inflammation exhibit symptoms that indicate a termination in gangrene or mortification, you must treat it as directed under that head—see mortification.

BLEEDING FROM THE NOSE.

In general bleeding at the nose is of little consequence, when it occurs in young persons; but when it occurs with these of more advanced age, flows freely, and returns frequently, it indicates too great a fullness of the vessels of the head, and is often followed by an attack of apoplexy or palsy; it is therefore, in such cases, regarded as a symptom of dangerous consequences. When bleeding at the nose occurs in the course of any putrid complaint, it is viewed as indicating a fatal termination.

The blood-vessel in the nose, are expanded on the internal surface of the nostrils in the form of a net work, and are covered only with a thin tegument or skin. On this account, the pressure of too great a quantity of blood to the vessels of the head, those of the nose are easily ruptured, or any kind of violence about the nose is apt to rupture them, and cause a discharge of blood from the nose. Some persons, owing to a peculiar weakness in the vessels in this part, are liable to frequent hemorrhages from the nose; but it is not apt to be followed by any bad consequence, unless it should bleed too much. Young persons of sanguine, plethoric habit are most subject to bleeding at the nose; females are less subject to it than males. Great heat, violent exertion, external violence, particular postures of the body, and every thing that determines too great a flow of the blood to the head may be considered as exciting causes of bleeding at the nose.

When bleeding at the nose happens to persons in good health, especially if they are of a full plethoric habit, it need not be suddenly checked, unless it is likely to bleed too much. But when it occurs in more advanced life, or returns too frequently, or continues till the patient becomes feeble and faint, no time should be lost until some attempt is made to put a stop to it.

TREATMENT.

When the bleeding is produced by too great a termination of the blood to the head, place the patient in an erect posture, bind to his feet the garlic or mustard poultice, or any poultice that will tend to produce a revulsion of the blood from the head;—then apply the vapor bath to the lower extremities only, and wet the head, face, and neck with cold water. This tends to render the circulation freer in the lower extremities, & draw the blood from the head. If this treatment should not stop the bleeding, you must use in connection with it some of the remedies recommended in ordinary cases of bleeding at the nose.

In most common cases, a snuff made of witch hazle leaves finely pulverized, and inhaled into the nostril from which the blood flows, usually stops the bleeding; or a snuff made of any astringent article, that will not produce sneezing, will generally answer the desired purpose. Washing the nose with some astringent tea, or holding it up the nose, will generally have a very happy effect in stopping the hemorrhage. For this purpose a strong ooze of oak bark would be valuable:—both the tea, and ooze when used thus should be cold.

BLEEDING FROM THE LUNGS.

This complaint may be brought on by any violent exertion, as running, loud speaking or singing, blowing on wind instruments; it may also be caused by wounds, inflammation of the lungs, weakness of its vessels, hard

coughing, &c. A hemorrhage from the lungs is not always to be considered as a primary affection, but is frequently a symptom attendant on some other complaint. When a slight spitting of blood occurs in pleurisy, inflammation of the lungs, and in most cases of fever, it is generally regarded as the presage of a favorable termination.

Spitting blood, which is the common name for this complaint, is sometimes preceded by a sense of weight and oppression at the chest, a dry tickling cough, accompanied with a slight difficulty of breathing, and a hard, jerking pulse. At other times, it is preceded by shiverings, coldness of the extremities, pains in the back and loins, flatulency, costiveness, and lassitude. The blood which is spit up is generally thin and florid, mixed with a small quantity of frothy mucus which is brought up by coughing.

Where there are no symptoms of consumption, or where it leaves no cough, difficulty of breathing, or other troublesome affection of the lungs behind, spitting blood is not considered dangerous, unless the hemorrhage becomes great; but when it occurs in persons of a weak, delicate habit, it is generally difficult to cure.

TREATMENT.

Hemorrhages from the lungs, can generally be cured by making a free use of the sudoric powders, and using other means necessary to promote perspiration; and by using three or four times a day, some astringent tonic tea, such as the witch-hazel, or birth-root. If there be any considerable cough, the patient should use some expectorant to promote expectoration and make the cough less severe: see expectorants, page 355. If it should be necessary, an occasional resort to the course of medicine, in addition to the above, will facilitate a cure. When the complaint is removed, it would be proper to continue the use of the astringent and bitter tonic powders until the patient is out of the danger of a relapse.

BLEEDING FROM THE STOMACH.

Bleeding from the stomach is commonly called vomiting blood. This complaint may be produced by any thing that gets into the stomach that wounds it, or that will stimulate it excessively; or it may be caused by blows, bruises, or any other cause that will excite inflammation in the stomach. Vomiting blood is seldom so profuse as to threaten the patient with immediate destruction. The principal danger arising from this complaint, is the great debility which repeated attacks of it induce, and the accumulation of blood in the intestines, which would become putrid, and thus lay the foundation of some protracted, fatal complaint.

TREATMENT.

Drink freely three or four times a day, of the astringent tonic powders, or of birth-root tea, and also of the diarrhoeic powders. In addition to this, take a table-spoonful of finely pulverized charcoal, once a day; and it will generally prove a useful auxiliary to the other means. It will operate as a styptic to check the bleeding, as an antiseptic to prevent inflammation, and as a laxative to cleanse the bowels. Keep the bowels open with injections, and use the tonic as directed in the foregoing complaint.

BRUISES.

An injury received on any part of the body by a blow or a fall, is termed a bruise. Under this head we will give directions for the treatment of all that are of so serious a character, as to require medical aid.

TREATMENT.

Says Dr. Shelton, "It is a very common practice" (with the faculty) "to draw a large portion of blood in-

stantly, without regard to habit, age, or circumstances. The object of this course is to produce an active circulation of the blood; this intention is good, but the practice is bad, and in many instances causes the death of the patient. We admit that the blood is in a stagnant state, and requires some thing to increase its action; but at the same time the whole system is paralyzed or weakened, and requires some thing to stimulate it." With these sentiments of the Dr. we perfectly concur; for experience has taught us that the practice of bleeding in such cases, is not only useless, but in many cases, is highly dangerous. There is nothing that the advocate of the lancet proposes to attain by blood-letting, that can not be attained in a way much more certain of producing the desired effect, and at the same time is perfectly safe.

If the injury be not a severe one, it perhaps will be sufficient for the patient to drink freely of some sudorific or diaphoretic tea, and bathe the affected part either with salt and vinegar, diaphoretic tincture, or with bathing drops; or tansy and wormwood, bruised and moistened will generally give relief from the pain, and remove all inflammatory symptoms. But if the bruise be very severe, in addition to the above, apply the vapor bath, and take your patient through a course of medicine, omitting the emetic, unless the health of your patient be otherwise bad, or his stomach foul. This course will immediately remove all inflammatory matter from the blood, and restore a healthy action to the vessels of the injured part, clearing out the obstruction occasioned by the bruise. Repeat the course of medicine, if the urgency of the symptoms require it.

SPRAINS.

A severe strain of the tendons, or ligaments is called a sprain, which most frequently happens in the ankles, knees or wrists. Usually a painful, inflamed swelling of the part takes place.

TREATMENT.

Few things are better for a sprain than pouring cold water on it from the spout of a coffee or tea pot, at as great a distance as you can bear; then dry it, and bathe it with pepper and vinegar or with bathing drops.— Wormwood, tansy, or camomile, bruised and steeped in vinegar, when applied, and kept wet with the same has a salutary effect in reducing the inflammation, and removing the pain. The leaves of the common burdock bruised and applied, will in general give relief as quick as any thing else. During the whole treatment the patient should drink freely of the sudorific or diaphoretic tea, and use other means to promote perspiration, and take a few doses of the nerve powders (see dispensatory.) Should weakness remain after the soreness and swelling are removed, the pouring of cold water as above directed, on the place occasionally, and wearing a tight bandage, will have a good effect.

BLOODY URINE

A discharge of blood by urine may be occasioned either by falls, blows, bruises, or some, violent exertion; but it often takes place in consequence of the lodgment of a small stone in the ureter, or in the kidney, which wounds the surface of the part with which it comes in contact, by its size or irregularity. When produced in the latter way it usually deposits a sediment of a dark brown color, generally somewhat clotted; and it is commonly attended with an acute pain and sense of weight in the back, with some difficulty in making water. When the blood proceeds immediately from the bladder its discharge is usually accompanied with a sense of heat and pain in the lower part of the belly.

Voiding bloody urine may be considered as danger-

ous complaint, particularly if mixed with any purulent matter. When this complaint occurs in the course of any malignant disease, it indicates a highly prurid state of the blood, and is mostly succeeded by a fatal termination.

TREATMENT.

When this complaint is produced by some external injury, as a fall, or a blow, your first effort should be to remove the effect of the injury received by the blow or fall, and restore a healthy action in the injured vessels. No method of treatment, will so readily and effectually do this, as the full course of medicine, repeated as often as circumstances require. In addition to the articles used in the course of medicine, the patient should drink freely three or four times a day, after the course, a tea of witch hazel, birth-root, or any article in the class of *astringents*. He should also drink a tea of peach tree leaves, or of the bark, if the leaves cannot be had, in sufficient quantities to keep the bowels open:—this has been found an excellent remedy in this complaint, and should always be used.

If the symptoms indicate, that the discharge of blood with the urine, proceeds from the lodgment of a stone in the kidneys, ureter or bladder, the treatment will be the same as that for the gravel; for of necessity the stone must be removed, or at least diminished in size before the voiding of bloody urine would be stopped. The severity of the symptoms may, however, be lessened by drinking a tea of marshmallows, or of slippery elm bark sweetened with honey. The patient may allay the irritation, and greatly mitigate the pain by injecting the elm tea into the bladder, and drinking freely of the tea, or tincture of the nerve powders. See page 199, for the method of injecting into the bladder.

INCONTINENCE OF URINE.

In this complaint, the patient involuntarily voids the urine, being utterly incapable of retaing it. A relaxation of the sphincter of the bladder, or an injury received about the neck of the bladder, may produce this complaint.

TREATMENT.

Evacuate the contents of the bowels with the stimulating tonic injection; and make a free use of the astringent and bitter tonic powders for some days. It will be necessary to use the butternut sirup, rhubarb, or some mild cathartic to regulate the bowels, while taking the tonic. Bathe the abdomen, and os.sacrum or lower part of the back bone with bathing drops; and occasionally apply the cold bath to the pubes, by pouring water from the spout of a coffee pot, tea-kettle, or something of the kind; then rub dry with a coarse piece of cloth. This will have a good effect in giving tone and strength to the relaxed organs, and facilitate a cure.

DIFFICULTY OF URINE.

When an individual experiences frequent uneasy urgings to void urine, and its discharge is accompanied with great difficulty and pain, the disease is then called *stranguary*; and when the urine is totally retained, it is called a *suppression of urine*.

This complaint is sometimes produced by wounds, or bruises; sometimes by blisters of cantharides, or by their tincture taken internally; by obstructions in the urethra; and lastly it is sometimes a consequence of the stone or gravel.

TREATMENT.

The treatment of this complaint must entirely depend on the cause from which it originated. If the complaint originated from *wounds* or *bruises*, commence your treat-

meat as directed under these heads, and thus you will remove the cause. In addition, you must use freely the diuretic powders, diuretic beer, or the diuretic sirup; or you may use simply the asparagus infusion:—see dispensatory, pages, 343, 344, 345, and 316. Keep the bowels regular by the use of butternut sirup, or laxative bitter powders, or by injections.

If the complaint proceeds from the blister or tincture of cantharides, the patient should first be carried through a full course of medicine, which will free the system from the effects of the cantharides; and then let him use some of the above recommended diuretics, and observe the same directions in relation to the regulation of the bowels; and a cure will be effected in a few days.

When this complaint arises as a consequence of the gravel or stone, the treatment must of course, be the same as that for that complaint. The patient may however, procure some mitigation of his sufferings before a cure of that complaint can be effected, by drinking a tea of peach tree leaves, or of the bark, elm tea, or mucilage of gum Arabic. If there be a total stoppage of the urine, it must be drawn off by the catheter; and if any symptoms of irritation prevail, inject elm tea into the bladder:—see page, 199.

GRAVEL AND STONE.

Gravel and stone, though distinguishable from each other, appear to have one common origin, and require a similar treatment. By *gravel* is understood the formation of calculi or small sand-like concretions in the kidneys or bladder; but if these concretions grow so large that they can not pass the ureters, nor the urethra; the complaint then bears the name of the *stone*.

The stone is a disease that occurs in persons between infancy and the age of fifteen; but the gravel may come on at any period of life. The discharge of the small gravel very seldom terminates in the stone. Many have

had the gravel for many years, and experienced but little inconvenience except the pain attending the discharge of the calculi. The formation of these calculi is generally attributed to an acid principle in the urine, called *uric acid*; but we think that if this were the fact, all persons would be the victims of this complaint, as all urine contains this acid. It is however, highly probable, that the uric acid is concerned in the formation of the calculi or stone, as any medicine that will neutralize this acid, will also dissolve the calculi or stone; but whether it is an excess of this acid, or the combination of some foreign ingredient with it, produces this disorder, or whether it is not the effect of the acid upon the morbid or decaying state of the urinary organs, we are not prepared to determine.

A fit of the gravel is accompanied with a fixed pain in the loins, sometimes shooting down to the thighs, with a numbness in the thigh or leg on the side affected; and sometimes nausea, and vomiting occur, with slight suppression of urine.

When the neck of the bladder is obstructed by a stone too large to pass, there arises a frequent disposition to void urine, which can only flow in small quantities, often drop by drop, attended with great pain. Rough motion or active exercise, throws the patient into great torture.

TREATMENT.

Hitherto few writers have recommended any thing that might be relied on as cure of the stone except *lithotomy*; an operation always attended with great pain, and great danger even in the most skillful hands, especially when the patient is advanced in years, or his general health much impaired. Of late many vegetable remedies have been recommended as being valuable for this painful malady, and some cases have been reported, of the stone's being dissolved by them; but we are not prepared to say that these remedies may be generally re-

lied on, yet we have no doubt, in the cases reported, they have effected some wonderful cures.

Some attention should first be paid to the general health of the patient, before remedies be used for removing this particular malady. For this purpose, perhaps nothing would be better than a few courses of medicine, with a free use of the astringent and bitter tonic powders. This would have a tendency to throw off all morbid action from the system generally, to strengthen the powers of the living machine, to restore a healthy action to the organs, and correct their secretions; and in addition to these, the use of the neutralizing mixture, (see dispensatory, page, 303,) made with a greater portion of the saläratus, will neutralize the uric acid, and thus check the further progress of the disease. If this mixture can not be had, the neutralizing drink page, 302, will perhaps answer. Keep the bowels regulated by the use of laxatives or injections;—this is a part of the treatment, that you must attend to in all cases; for its neglect hinders the good effect of your remedies, and in many cases, if costiveness prevail, it will defeat them entirely.

In the class of diuretics, both in *materia medica*, and in the dispensatory, you will find many articles described, that have been recommended as valuable for this painful complaint. We shall however, direct your attention to a course of treatment that has been successful in several well attested cases.

The juice or decoction of the garden radish, has performed some wonderful cures, in some cases that had been considered hopeless, even after an entire stoppage of urine had taken place for some days; and one case is recorded in which its use proved completely successful after the patient had been given over to die, and had under that expectation, taken what he supposed would be his final leave, his long farewell of weeping friends. The circumstance that led to the discovery of the virtue of the radish was apparently accidental. A stone which had been taken from the bladder of a person, that had died with this complaint, happened to lay one night in

contact with a slice of radish, and by morning it was found partly dissolved. This led to the trial of the juice or decoction of the radish, and so far as we have ascertained, its use has generally proved successful.

In cases of the stone, some practitioners, that have treated it successfully, recommend as a part of the treatment, the injecting of substances into the bladder, that dissolve the stone. This plan would certainly be very successful, if the substances injected did not prove too irritating; but even that may, in general, be remedied by injecting a tea of slippery elm bark, when any symptoms of irritation occur. The reader is referred to page 199 for a full description of the method of injecting substances into the bladder. It is said that the decoction of radishes, or weak alkaline preparations, such as a weak pearlash water, or a weak lye, when injected will dissolve the stone. The same directions that are given in relation to the hops, page 199, may be observed in relation to these substances. The following treatment has been employed with success in curing the gravel:

Make a decoction of blackberry brier root two parts, and colic root one part:—of this decoction drink a half tea-cupful, repeated every ninety minutes for thirty hours; and fifteen minutes after each dose, take a half a tea-spoonful of pleurisy root, and nearly the same quantity of man root, (page 195,) in hot water sweetened. Keep the bowels regular either with a tea of peach tree leaves or bark, or with injections. After the above has been given thirty hours as directed, let the patient drink freely of the tea of garden parsley, for two or three days. If there should be a cessation of pain, and a copious discharge of sediment in the urine, let the patient continue the use of the parsley tea a few days, and use at the same time the tonic powders, or some restorative to improve his general health; but if there is not a cessation of the pain, nor a copious discharge of sediment, the course must be repeated another thirty hours.

DIABETES.

This inveterate complaint is characterized by a great flow of urine, which has a sweetish taste like sugar and water, a faint smell, as if mixed with rosemary leaves. The quantity of water usually discharged in this disease is more than double the quantity of liquid taken both in food and drink; and it is as transparent as spring water. After the disease runs on for some length of time, the skin becomes dry and harsh; the thirst is great, the appetite voracious; there is a gradual emaciation of the whole body, attended with great debility, a sense of weariness and an aversion to motion; there are frequent darting pains in the privates, accompanied with a dull heavy pain in the small of the back; the bowels are costive, the pulse irregular; and if the disease is suffered to advance, fever supervenes, with other hectic symptoms; the feet swell, and death ensues in a short time.

Diabetes appears to be the effect of a diseased state of the kidneys, called by some, "the consumption of the kidneys."

TREATMENT..

The first thing that should be attended to, is the general health of the system. It should be cleansed of all morbid matter, and cleared of all obstructions, so as to promote a healthy action in all other parts, and then you will find less difficulty in operating successfully on the diseased kidneys. To effect this, carry your patient through a few courses of medicine, using between each course of medicine, the bitter and astringent tonic powders three or four times a day. Your own judgment must determine, how often the case may require the course of medicine to be repeated:—the tonic powders, or tonic cordial, or at least some restorative should be continued throughout the whole course of treatment.

Having restored a healthy action to the organs of the system generally, you must now try to operate on the diseased organ. Commence by giving the patient a tea-

spoonful of the pulverized root of lady's slipper, three or four times a day; at the intervals between each time, give a dose of bayberry or some other astringent powders. The best remedy yet found for this disease, is said to be the water agrimony.

The diet of the patient should be nourishing, and mostly of flesh, avoiding the use of acids or vegetables.

DROPSY.

Dropsy is the collection of a watery fluid in some part of the body. Systematic writers have given different technical names to this complaint according to the part of the body in which the water collects. When the dropsical fluid collects in the cellular membrane, which situated between the flesh and skin it is called *anasarca*, or dropsy of the cellular membrane. When the accumulation is in the thorax or chest it is termed *hydrothorax*, or dropsy of the chest; when in the cavity of the abdomen it is called *ascites*, or dropsy of the abdomen, &c.

Dropsy sometimes ensues from frequent salivation, or the repeated use of mercury; free use of ardent spirits; long continued evacuations; affections of the liver, spleen, pancreas, mesentery, &c.; or it may follow some other disease, as jaundice, diarrhea, consumption, intermittent fevers, &c.

Anasarca or dropsy of the cellular membrane, first gives symptoms of its approach by a swelling of the feet and ankles. This swelling may be distinguished from a swell from any other cause, by its being soft and inelastic, that is, when pressed upon by the finger, the mark or impression remains sometime after the finger is removed. The place where the impression was made becomes paler than any other part. The swelling extends upwards, by degrees, to the thighs, trunk of the body, and finally to the head and face. If the disease be not checked, the internal parts are apt to become affected; and from the effusion of the dropsical fluid in the cellul-

air tissue of the lungs, the breathing is soon rendered difficult, particularly when the patient lies down. A cough soon follows, accompanied with an expectoration of a watery mucus; the bowels are costive; the urine voided in small quantities, which is now high colored, and deposits a reddish sediment; the perspiration is obstructed; the skin sallow; the thirst great; and these symptoms are succeeded by a dull, torpor, and a slow fever.

In *ascites*, or abdominal dropsy, the fluid usually collects within the peritoneum or internal lining membrane of the abdomen; though sometimes it accumulates between the peritoneum, and the external parts or walls of the abdomen. This kind of dropsy is often preceded by a loss of appetite, sluggishness, dryness of the skin, thirst, oppression of the chest, cough, decrease of urine; a swelling of the abdomen takes place, which increases gradually, until the whole abdomen becomes tenesly swelled. As the water accumulates, the breathing becomes more difficult; the countenance palid and bloated; the thirst immoderate; the urine scanty, high colored, and depositing a brick colored sediment.

Hydrothorax, or dropsy of the chest, frequently comes on with a sense of uneasiness at the lower end of the breast bone, and difficulty of breathing, which is much increased by any exertion, or by lying down. A cough supervenes, at first dry, afterward attended with an expectoration of a thin mucus. As the disease advances the complexion becomes sallow, the feet and legs swell, the urine diminishes, the thirst increases; at length the breathing becomes very difficult, the urine high colored; depositing a red sediment; there is also great anxiety, starting in the sleep, and frequent palpitations of the heart. The face and extremities now become cold; the pulse feeble, and irregular; a numbness extends from the heart towards one and sometimes both shoulders; the difficulty of breathing continues to increase until the action of the lungs is entirely stopped by the oppression

of the water, when death ends the patient's bodily sufferings, and mortal existence together.

TREATMENT.

Anasarca or dropsy of cellular membrane, sometimes called general dropsy, if taken in its early stages, and treated perseveringly, can generally be cured. Ascites or abdominal dropsy can generally be relieved, yet it is difficult to be cured. Sometimes all three of these forms of dropsy are combined in one general attack on the citadel of life; the case is then a desperate one.

The great objects to be aimed at in the treatment of dropsy, are the dislodgment of the dropsical fluid, and the restoration of a healthy tone and vigor to the system, that secretions may be corrected, and carried on in the natural way, and thus the future accumulation of the dropsical fluid may be prevented.

To answer the first intention, viz: the dislodgment of the water, nothing that has ever yet been tried, is equal to repeated courses of medicine connected with the daily use of diuretics: to answer the second, viz: the restoration of a healthy tone to the system, use the bitter tonic rendered laxative with the black root, instead of the bitter root, combined with an equal portion of the astringent tonic. This tonic ought to be used three or four times a day between each course of medicine. The vapor bath ought to be perseveringly used every day, for experience has fully proved that no other treatment yet tried, is equal to it in dislodging water. The emetic may be omitted every other day in the course of medicine; but you must not omit any thing else here recommended. Particular attention must be paid to the state of the bowels;—they must be kept regular. The course here recommended by being persveringly followed has proved highly successful in anasarca dropsy; but dropsy in the chest, and dropsy of the belly are much more difficult of cure, as from the situation of the dropsical fluid, it is more difficult to be dislodged.

An operation called tapping has frequently been resorted to in ascites or dropsy of the abdomen, for the purpose of drawing off the water; but even then a cure is not always certain. Tapping is performed by an instrument called a *trocar*, which is about three or four inches long, and is sometimes flat and sometimes round. The blade of the trocar is covered by a silver tube of the proper size to let the trocar pass through it.

When the operation is performed, the patient may either sit on a chair, or lie on the side of a bed. A long cloth or towel must pass round the upper part of the abdomen, and be secured behind by an assistant; the use of this is to press the fluid downwards, and give support to the diaphragm:—tapping without this precaution is apt to produce fainting.

Apply the point of the trocar, previously smeared with oil, to the abdomen about one inch and a half below the navel in the *linea alba*, and then steadily push the instrument with the right hand, having the fingers so placed on the case as to prevent the point from entering too far, when it enters the cavity of the abdomen. Its entrance is readily perceived by the cessation of resistance, when the operator must desist from pushing the instrument any farther. While the point of the instrument is entering the operator generally gives it a half rotary motion, turning it a little one way and then the other. This makes room for the point of the tube to enter so as to convey off the water; and as the water flows, the towel or cloth around the abdomen, must still be drawn proportionally closer. Should the tube become stopped by lymph or the caul, the obstruction must be removed by a blunt probe, which in the absence of a metallic one, may be made of a tough piece of hickory wood.

When the water is evacuated, close the orifice, covering it with a pad of lint, and apply a tight bandage around the abdomen so as to give it a sufficient compression.

Having thus dislodged the water, your next object should be to prevent its accumulation. The best means

to effect this, that we have ever known to be tried, is repeated applications of the vapor bath, occasionally giving a full course of medicine, together with the tonics and diuretics, used as recommended for anasarcaous dropsy. Continue this course perseveringly; for sometimes the patient has to be tapped two or three times before the complaint can be entirely conquered.

HYDROCELE.

This complaint may be regarded as a species of dropsy; it is a collection of water in the scrotum to which it is entirely confined. The scrotum is sometimes enlarged to a very great size. It has a soft inelastic feel retaining the impression of the fingers like other dropsical swellings. The countenance assumes a yellowish palid appearance; the appetite fails; the urine diminishes; the legs swell; the stools have the appearance of mucus. This complaint is mostly connected with some other disorder.

TREATMENT.

The treatment should be much the same as for anasarcaous dropsy. You must however bathe the part alternately with the antiseptic tincture, and with the tincture of lobelia. When this treatment does not carry off the water, a slight puncture must be made with the point of a lancet so as to let the water flow off. Then treat the patient as directed after tapping in abdominal dropsy, until a cure is effected.

COLIC.

This complaint is a violent pain in the bowels, originating from a constriction of the muscles in the parts where the pain is seated; and is often attended with

costiveness and vomiting. Causes which predispose to an attack of colic, are, flatulence, indigestible food, redundancy of bile, costiveness, colds, worms, poisons; sudden check of perspiration, drinking too freely of acids; intermittents improperly cured, &c. Colic has been distinguished into different kinds, as flatulent, biliary, nervous or hysterical, &c.

In flatulent colic there is a distention of the stomach; an inclination to vomit, and belch wind, attended with pain, soreness, and griping of the bowels, with coldness of the extremities.

In biliary colic there is an acute pain about the navel; costiveness, and vomiting of a biliary matter; loss of appetite, and a bitter taste in the mouth. In the nervous or hysterical colic there is severe spasms; sickness at the stomach; costiveness, and dejection of the spirits.

TREATMENT.

In all cases of colic, where costiveness prevails, administer some laxative ointment immediately, and repeat it at short intervals, as often as necessary, until the contents of the bowels are completely evacuated. Give at the same time some of the preparations recommended for colic, (see pages, 333, 334, and 335.)

If this should not give relief, carry the patient through a full course of medicine; and keep up the perspiration for some time, giving him diaphoretic tea, nerve powders, and tonic powders to restore tone to the bowels, and strength to the system. In some cases the stimulating tonic ointment has a most happy effect;—the proper time to give it is during the course of medicine. Repeat the course if necessary though it is seldom necessary, for in most cases, the first gives entire relief.

CRAMP, TETANUS, OR LOCK-JAW.

These painful spasmodic affections, are too well known to require any particular description of their distinguishing symptoms; and as they require a similar treatment, we shall range them under one head, and proceed to give the treatment for such spasmodic affections.

TREATMENT.

Persons liable to repeated attack of spasms, or fits, as they are sometimes called, would do well to use some preventatives. For this purpose they would derive benefit from the use of the astringent and bitter tonic powders, with an occasional resort to the vapor, and cold bath, to which they may add the fit powders, page 379.

On the first approach of an attack, take a large tea-spoonful of the nerve powders, to which you may add a half tea-spoonful of cayenne. If this gives no relief, resort immediately to the antispasmodic tincture in large doses repeated as often as the urgency of the symptoms require. The bowels should be well evacuated by injections; and if you find it necessary, carry the patient through a course of medicine.

Sometimes it has a salutary effect to bathe the part affected with spasms, either with oil of sassafras, bathing drops, or with cayenne and vinegar.

Where the cramp or lock-jaw has originated from some wound or bruise, the injured part must be treated as directed under the proper head; for you will find it extremely difficult to remove an effect, while the producing cause remains. Neglect on this point, has rendered the lock-jaw quite a formidable disease, and pretty generally secured it the name of an incurable one.

When the injury has been neglected until the spasms have come on, the jaws set, and the teeth closed;—first make the proper application to the injured part, and then pull open the lips at one corner of the mouth, and pour in a good dose of the antispasmodic tincture, (see page

310 and 311,) and that will soon find its way to the root of the tongue, and will in a short time give the patient the use of his jaws;—the dose repeated as occasion may require, soon gives entire relief.

EPILEPSY.

Epilepsy is characterized by a sudden deprivation of sense, accompanied with convulsive motions of the whole body; and usually there is a degree of stupor and weakness remaining after the paroxysm or fit has gone off.

Causes which may produce epileptic fits are, injuries done to the head by external violence, collections of water in the brain, tumors, concretions, violent affections of the nervous system, sudden frights, fits of passion, acute pains, worms, teething, poisons, &c.

These fits usually approach without giving the individual attacked much if any previous notice. At times however, an approach of a paroxysm is indicated by a dull heavy pain in the head, dimness of sight, noise in the ears, palpitations of the heart, stupor, wind in the stomach and intestines, &c. When the fit comes on, the patient suddenly falls down; the eyes are distorted, exhibiting only the white part of them; the hand is closely clenched; the patient foams at the mouth, and thrusts out his tongue, which often sustains great injury from the teeth, owing to the convulsive motions of the lower jaw; he loses all sense of feeling, and very frequently voids urine, and discharges stools involuntarily.

When the paroxysm abates, the patient gradually recovers; but he feels languid, and exhausted, not retaining the smallest recollection of any thing that passed during the fit.

Should these fits occur in persons of mature age, or recur frequently, and last long, they are generally difficult of cure;—the same may be said of them when they

occur as a hereditary complaint, which is sometimes the case.

TREATMENT..

When the general health of the patient is bad, your first attention should be directed to its restoration. Employ repeated courses of medicine to clear out obstructions, and throw off all morbid matter from the system; and employ the astringent and bitter tonic to restore the tone and vigor of the system.

When epilepsy is caused by worms, teething, injuries of the head, &c., these exciting causes must be removed by the proper treatment. Having taken these measures for the restoration of a healthful action to the system, so far as possible, your next effort should be to prevent the recurrence of the fits, and if possible, break the chain of convulsive action.

If the patient is sensible of the approach of the paroxysm, let him drink freely of the nervine tincture and one or two doses of the antispasmodic tincture, to break its violence, or perhaps it may prevent its coming on at that time. If you can once break the chain, or even abate the violence of the fit, you may take courage, and ply the remedies perseveringly, for that is a favorable symptom that the enemy is begining to yield. While the fit is on, give the patient an injection of catnip, witch-hazel, birth-root, fit-root, or spleen-wort tea, into which you should put a tea-spoonful of the antispasmodic tincture; and a half or whole tea-spoonful of this tincture should be given occasionally at the mouth. This will have a tendency to shorten the fit, and break the habit to which the system has become subject; and this will aid in destroying the connection of the disease.

Persevere in the above course, using the tonics three or four times a day until all danger of a return of the fit is past. You will also find the chocolate root a valuable restorative of the constitution; see page 161.

PALSY.

This disease is characterized by a deadness or want of feeling, and a loss of the power of motion in the part affected. The left side is more apt to be attacked by this complaint than the right.

The causes which predispose to an attack of palsy, are, attacks of apoplexy; any injuries that obstruct the nervous fluid from passing from the brain to the organs of motion, injuries of the spinal marrow; obstruction of necessary evacuations; intemperance; excessive venery; handling a great quantity of white lead; intense study, and great distress or anxiety of the mind.

An attack of this complaint in advanced age, is generally very difficult to cure; and when it arises from apoplexy, or injuries of the spinal marrow, it is generally incurable.

TREATMENT.

Palsy, although regarded as highly dangerous, and often fatal, is sometimes curable: this fact should stimulate you to make an immediate and persevering application of the remedies. It is important to take the complaint in its first onset. Lose no time until a dose of the nervine tincture, and one of the antispasmodic tincture be given, which should be repeated a few times, at short intervals. In the mean time, an injection of the stimulating tonic kind, should be administered, and the affected part, and particularly, the back bone, should be well bathed with the strongest cayenne and vinegar, or with bathing drops, applied with much friction, and often repeated. This being done, carry the patient through a course of medicine, giving in the course a stimulating tonic injection, and also administering a cathartic. The patient's strength should be kept up by the use of the astringent and bitter tonic three or four times a day. This course of treatment must be repeated as often as circumstances require. After the second or third course, if possible, shock the patient, either with the Leyden-

jar, or with the Galvanic battery: this often has a happy effect. The shocks however, should only be slight, and often repeated.

The diet should be light and nourishing; and the patient's bowels should be kept loose during the whole treatment.

COSTIVENESS.

This is a troublesome complaint, and often occurs in connection with some other disorder of the stomach or liver, or both. Indigestion or dyspepsy is usually accompanied with this complaint. Great costiveness or constipation of the bowels brings on pains in the head, flatulence, vomiting, stupor or general dullness, melancholy or dejection of spirits, and some degree of fever.

Persons who lead a sedentary life, particularly, if they are of a sanguineous and choleric temperament, are peculiarly liable to become the subjects of this troublesome disorder. Eating improper food; neglecting the usual time of going to stool; the habitual use of opium; and finally whatever injures the tone of the bowels may produce this complaint.

TREATMENT.

It is a very common practice among persons subject to this disorder to resort immediately to the use of purgative medicines; and although they may derive a temporary relief from the use of the purgative, yet the united testimony of all experience will bear me out in saying that the practice is a most injurious one; and instead of correcting the habit of costiveness, it increases the complaint when the evacuation is over, as purgatives in this case particularly, at every operation leave the action of the intestines weakened, and their tone more injured. Purgatives operate by stimulating the intestines into an excited or forced action, without adding any thing to

their tone or strength, consequently each purgative employed lessens their excitability and diminishes their tone. The great cause of this disorder is a loss of tone in the intestines, consequently, the proper indication of a cure, is to use such remedies as have a tendency to restore a healthy tone to the intestines.

If costiveness be great, first give a laxative clyster, or some similar injection; and give two or three doses of the bitter laxative tonic a day, more or less as the case may require. This course pursued, will not only give relief to costiveness, but it will increase the tone of the intestines. The patient's diet should be composed mostly of ripe fruits and vegetables. It may perhaps be necessary to employ some tonic injection occasionally. This simple treatment, persevered in, will in most ordinary cases, effect a cure. Finely pulverized charcoal, taken in table-spoonful doses mixed with honey or molasses, and repeated as often as necessary to keep the bowels in at least one motion a day, has in many cases of this complaint, a most salutary effect in performing a cure. Persons liable to attacks of this disorder, should regularly retire every day to the temple of Cloticina, and solicit nature to the discharge of her office, although at first they should not feel any inclination of going to stool. Perseverance in this, will establish a habit of regularity, which is of great importance in this matter.

If the disorder is attended with fever, and sickness at the stomach, &c., it is evidence there is morbid action in the system that must be removed. To effect this, it will be proper to carry the patient through a few courses of medicine, in addition to the above.

A fresh egg beat up in a quantity of cold spring water equal to the egg, and drank on an empty stomach in the morning, will be found very valuable for this complaint. Taking a handful or more of clean wheat bran two or even three times a day, has in many cases of this disorder, proved to be a salutary and efficient mode of treatment. The bran may be taken in any way you

find most convenient; and you must regulate the quantity according to what you find necessary to cleanse the bowels and stomach and keep them in good order.

When this disease depends upon some other, as dyspepsy, affection of the liver, &c.; attention must be paid to such complaint, in connection with the course prescribed for costiveness.

DIARRHEA OR LAX.

This disorder is characterized by frequent and copious discharges from the bowels, generally without sickness or pain, succeeded by loss of appetite; though in some instances, there is griping, and slight vomiting.

The causes, which are likely to produce this disordered state of the bowels, are first catching cold, which, checking perspiration, determines the flow of the fluids into the intestines; acid or putrid aliments; acrid bile; drinking bad water; worms; violent passions; teething; or the translation of morbid matter of other diseases to the bowels.

TREATMENT.

In common cases of diarrhea, if there be no sickness at the stomach, it may be removed by first taking some simple cathartic, as a tea of the leaves or bark of the peach tree, or the butternut sirup, to cleanse the bowels of acrid matter; and then take a few doses of the diaphoretic tincture, and some astringent tonic powders, or the blackberry sirup:—you may find in the class of astringents many articles that are valuable for this complaint, and may be used instead of the astringent tonic powders. Astringents should never be used in this disease, before something has been employed to clear out the acrid matter from the bowels. Few things are more valuable for children, in this complaint, when it proceeds from acrid matter in the stomach and bowels, than the neutralizing mixture, see page 303.

When this disease has originated from worms, rem-

edies must be employed for their removal, before a cure can be effected. If sickness of the stomach attend this disorder, an emetic, and perhaps a course of medicine will be necessary:—the same be necessary in case obstructed perspiration attend.

DYSENTERY OR FLUX.

Dysentery is known by frequent discharges from the bowels; and is easily distinguished from the diarrhea by the peculiar painful griping, and tenesmus, which attends it. When the stools are mixed with blood, this complaint is then mostly called bloody flux.

This complaint is more apt to prevail in the latter part of summer, and in the fall, though it frequently occurs in other seasons of the year. Sudden changes from heat to cold, and from drought to moisture, predispose the system to an attack of this disease, as such changes coming in quick succession are apt to give a sudden check to perspiration, and determine the fluids to the intestines. Dysentery may also be produced by unwholesome, putrid food, and by breathing noxious vapors. Some writers say it is a contagious disease, others aver that it is not: the truth is difficult to ascertain.

This disorder is more prevalent in warm climates than cold, and in rainy seasons than dry ones.

The stools assume different appearances; they are sometimes composed of a frothy mucus streaked with blood; at other times they are an acrid, burning watery fluid, bearing some resemblance to the washings of meat; at other times there is pure blood. In some instances there are hard lumps passed; in others, there is a coagulated mucus, and in others still, there is a quantity of purulent matter.

When this disease attacks persons of feeble constitutions, or those laboring under scurvy, consumption, &c., it generally proves fatal. Severe gripings, great tenes-

mus, small foetid stools, great debility, violent fever, cold clammy sweats, hiccups, coldness of the extremities, livid dark colored spots on the skin, with a feeble, irregular pulse, are to be regarded as symptoms of a fatal termination.

TREATMENT.

Taken in its early stages, this complaint in general is not difficult to cure; but if suffered to run on it is sometimes extremely difficult to remove, requiring the most active remedies perseveringly employed, or you will lose the patient.

When you first discover the approach of this disorder, take one table-spoonful of the diaphoretic tincture in a half tea-cupful of the tea of diaphoretic powders;—this will have a tendency to soothe, heal, and strengthen the irritated bowels. In ten or fifteen minutes after taking the above, you must take a cathartic to carry off the acrid, irritating matter from the bowels; and you would greatly facilitate the success of your treatment by giving the alkaline injection; see page, 361. As soon as the cathartic has operated, give another dose of the diaphoretic powders, and diaphoretic tincture.

If this treatment do not check the disease, or if it has progressed too far before remedies have been resorted to, more active measures must be adopted. Prepare your patient for a course of medicine, by giving him a few doses of the sudorific powders at short intervals, into each of which put two tea-spoonsful of the diaphoretic tincture; and whilst he is taking this, administer the alkaline clyster, or if the means of preparing this, are not at hand, a decoction of the bark of the root of white sarsaparilla, into which you may put two or three table-spoonsful of lye, will answer for a substitute. When this has operated, carry the patient through a full course of medicine, giving in the course the antiseptic injection. Repeat the course if the urgency of the symptoms require. Between the courses use the astringent tonic powders, and the antiseptic or diaphoretic tincture. The antiseptic

tic decoction, page, 316, will be found a most efficient article in this disease. Great reliance must be placed on repeated antiseptic, and astringent tonic injections, in all bad cases of this complaint. The propriety of this must be evident, when it is known that dissections of persons who have died with this complaint, show that the internal coat of the intestines, is affected with inflammation, ulceration, scirrocity, and gangrene. Hundreds of bad cases of this disorder have been cured with little else than injections of the decoction of slippery elm bark, and some astringent tonic teas. When the disease has been conquered, be careful to avoid any exposure for fear of relapse, which is easy brought on; and drink freely of some tonic to restore tone and strength to the bowels and to the system generally.

CHOLERA MORBUS.

This complaint is characterized by frequent puking and purging. In cold climates this disease is most prevalent in the fall, or latter part of summer, when there are sudden transitions from heat to cold; but in warm climates it occurs at all seasons.

Cholera morbus usually attacks with sickness at the stomach, pain, flatulence, and acute griping in the bowels; these symptoms are succeeded by vomiting and purging, attended by heat, thirst, hurried breathing, and a quick, feeble, fluttering pulse.

Exposure to sudden changes of air; getting the feet wet; violent passions of the mind, or any thing that produces a sudden obstruction of perspiration or any of the natural evacuations, or secretions, may cause this disease: it may also originate from unwholesome, putrid food.

When there is great depression of strength attended with cold clammy sweats, coldness in the extremities, cramp in the legs, hickups, short, hurried respiration, with a sinking, irregular pulse, the symptoms indicate

a fatal termination without immediate relief; and it is generally too late in this stage to apply for medical aid.

TREATMENT.

Cholera morbus in its first stage, may generally be cured with little trouble. A dose or two of the neutralizing drink, or neutralizing mixture, page, 302 and 303, or any thing that will neutralize the acid in the stomach, may be substituted; and a dose or two of the diaphoretic tincture, followed by a cathartic, will generally remove the disorder. Cholera sirup in table-spoonful doses will be found a valuable article in this complaint. The alkaline and antiseptic injections should be resorted to, and great advantage may be received from their use. The mint fomentation applied to the pit of the stomach, or some other antiemetic preparation will often be useful in checking the vomiting, see pages, 309 and 310.

In violent attacks, the course of medicine must be employed to remove obstructions, and throw off the morbid matter. After the course, use the astringent tonic freely in connection with the other remedies, above recommended. Delays in this complaint are dangerous; hence it is important to commence early, and ply your remedies perseveringly.

BURNS AND SCALDS.

When a burn or scald is first received it is very painful; it is therefore, of the utmost importance to have a remedy at hand, that will not only effect a cure but give instantaneous relief to the pain. Cold water affords the most speedy relief of any thing we have ever seen tried, or even heard of, which fortunately is generally at hand and readily obtained.

On receiving a burn or scald, immediately plunge the part into cold water and keep it there from half an hour

to an hour, until the fire is all out, which can easily be known by taking it out of the water; if the fire be not out, it will smart and pain you as a burn does, but if it is out, no such pain will be felt. If the part burned or scalded be so situated that you can not immerse it in cold water, apply several plies of cloths to it, and keep them wet by pouring cold water on them. If this be done as soon as the burn or scald be received, it will prevent it from blistering, and consequently prevent the formation of a sore or ulcer from the burn.

To obviate the danger of taking cold from the application of the cold water, the patient should drink four or five doses of pepper tea, or of the diaphoretic powders during the time, and always take one dose after the cold water is dispensed with.

The above treatment has cured some cases of scalds and burns in one hour, that were thought by persons not acquainted with the efficacy of cold water, to be even dangerous to the life of the patient; yet not a blister was raised.

When this plan has not been adopted in time to prevent blistering, and an ulcer or sore is produced from the burn, you must employ a poultice or ointment to reduce the inflammation; (see pages, 365 and 370;) after the inflammatory symptoms are removed, apply some salve to heal it up. If high inflammatory symptoms prevail, in any sore produced by burns or scalds, you must treat it as directed under the head of inflammation.

WOUNDS, CUTS, &c.

Wounds are usually distinguished into three kinds; viz: incised wounds, or cuts; punctured wounds, or wounds inflicted by pointed instruments, as awls, nails, &c.; and contused wounds, or wounds produced by blunt bodies: under this head are included all bruises, and all gunshot wounds: of the former we have already treated under the head of sprains and bruises.

TREATMENT.

Most ordinary cuts require but little attention except binding up with a cloth or bandage; balsam of fir or soft turpentine applied immediately, generally prevents inflammation, removes pain, and heals it up in a short time. But when the cut is large and bleeds freely;—wash off the blood with cold water, cleansing the wound of all dirt or filth; then draw the edges of the cut together, and bind it up carefully, and occasionally pour cold water on it, as often as it feels hot, the patient drinking some diaphoretic tea at the same time. This course properly attended to, succeeds most admirably in preventing inflammation, and promoting the healing of the wound. Wetting the cloth about the wound with the diaphoretic tincture also has a very good effect:—the healing salve, page, 374, will be found a valuable application to wounds. If the incision or cut be very large it will perhaps be necessary to confine the edges together by a few stitches, or by the application of an adhesive plaster. See page, 372.

When a small artery is wounded, which may be readily known, for the blood from an artery does not flow in a continued stream but by spurts, you must employ some means to stop the bleeding. This is usually done by medicines called *styptics*; see class of *styptics*, page, 376, and article *crane's bill*, 170; but the bleeding is often stopped by elevating the wounded part above the heart or head, binding it up tightly, and keeping it wet with cold water. When large arteries are wounded and the bleeding can not be stopped by *styptics*, you must stop the flow of blood as much as you can by pressure on the ends of the wounded artery, until some skillful person can be got, who can take up the ends of the artery and secure them.

If a wound inflames, reduce the inflammation as directed under that head. After the first dressing, large wounds may be treated as simple ulcers. Some healing salve is all that will be necessary, unless inflammation

take place. These directions are deemed sufficient to enable any reader of ordinary intelligence to treat almost any wound successful.

CORMS.

These afflicting companions are horny excrescences growing generally about the joints of the toes, and sometimes on the sides and bottoms of the feet. They originate from wearing tight shoes, and are generally very painful, as well as troublesome to cure.

TREATMENT.

Many things have been recommended and tried for the removal of these painful excrescences, but all avail little, unless the pressure of the shoes is removed. The surest method of performing a cure, with which we are acquainted, is to make a leather cover for the toe or part on which the corn grows, and cut a hole in this leather, answering in size and position to the corn;—this will protect the corn from the pressure of the shoe. The foot should now be stripped, and the corn soaked in warm water until soft, then shave off the horny part, though not so close as to make it sore, anoint the part with nerve ointment, or the discutient ointment, wrap it with suet skin, and put on the leather cover to protect the part from the pressure of the shoe. This treatment seldom fails to effect a cure. Balsam of fir or opodel-doc, may be substituted for the nerve ointment, or the discutient ointment.

CARBUNCLES.

Carbuncles are painful, burning tumors, much inclined to mortify, and difficult to cure. They most commonly commence with a small pimple, rising above the

skin, and exhibiting an appearance in their progress similar in some degree to the common boil, and usually contain a bloody water. Sometimes they commence with the formation of a hard substance in some fleshy part, with a violent throbbing pain, and burning heat. On their first appearance their color is red; but as they progress, they assume a dark, and even a putrid appearance.

TREATMENT.

Open the tumor and press out its irritating contents. You should now apply the drug poultice, page, 369, if one is to be had. This poultice will promote suppuration, and loosen the core so that it can be taken out, quicker than any other we know of;—it will also prevent mortification. The tumor should occasionally be washed with some astringent tonic decoction. When the tumor has suppurated and the inflammation is removed, you may apply some healing salve and heal it up. As tumors of this kind have a great tendency to terminate in mortification, the patient should take some medicines internally to guard against such a result. For this purpose, he will derive benefit in drinking daily four or five doses of the diaphoretic powders, adding to each dose a half a table-spoonful of the diaphoretic tincture; and in addition to these, he should take two or three doses of the laxative bitter tonic each day to keep the bowels regular, and sustain the tone of the system. Should mortification actually occur, treat it as directed under that head.

CANCER.

The term cancer has been applied to all eating, spreading ulcers of a virulent kind. Of the concreous ulcer, there appears to be several kinds; but the medical profession have reserved the term cancer for the most incurable kind, asserting that an ulcer, that can be readily cured,

at once "affords the most convincing proof of its not being the genuine cancer, whose obstinate, violent, unyielding character is fully exhibited in the fact of the defeated skill, and baffled efforts of the whole medical profession, in attempting their cure from the days of Hippocrates to the times in which we live."

A cancer usually commences with a small inflamed pimple of a bluish color, which as it progresses, becomes a sore of the worst kind, with hard, uneven or ragged edges, often spreading rapidly, discharging a thin acrimonious, and extremely foetid matter, that excoriates the skin around the sore. On a close examination of the ulcer, two whitish lines crossing from the center to the edge of the sore, are usually discoverable.

Cancers are usually seated in some gland, but are sometimes seated in some other part, as the hand face, &c. As the swelling increases in size and hardness, it is usually attended with darting, twinging, or lancinating pains, and with a swelling of the veins in the vicinity of the part. After the ulceration commences, in its progress it often produces considerable hemorrhages from the erosion of the blood vessels.

TREATMENT.

Whenever a tumor makes its appearance, accompanied with manifest symptoms of its being of the cancerous kind, you should immediately adopt the most efficient means of throwing off all morbid matter from the system, and of restoring a healthy, vigorous tone to the organs. No treatment with which we have had any acquaintance, so readily, and effectually, attains this desirable end, as the course of medicine, repeated as often as the case may require, and using with it the tonic powders three or four times a day.

While this course is pursued for the general health of the system, the tumor should also receive some attention. Some of the cancer plasters recommended page, 373, should be applied and renewed every day. Tak-

ing an early start, and pursuing this course perseveringly, you will seldom fail to effect a cure before it ulcerates; but if it should ulcerate, notwithstanding this treatment, or is in this state before medical means are resorted to, do not give up the case as utterly hopeless, though you will find it much more difficult to cure. Employ the course of medicine perseveringly, together with astringent and bitter tonics, in connection with which you should use a tea of the pipsissewa and narrow dock, (see these articles in *materia medica*.) This will have a tendency to cleanse the system of morbid matter to purify the blood, and change the cancerous habit of the fluids, as well as to promote a vigorous healthy action in the organs.

If the ulcer be much inflamed, apply some of the cleansing and antiseptic poultices recommended in this work, or some similar poultice; see pages, 369 and 370. The poultice should be frequently renewed, and the tumor well washed with a decoction of the sour dock, wild lettuce, or pipsissewa, or some astringent, cleansing article. When you have pursued this course until the inflammation is removed, apply the cancer balsam, or some of the cancer plasters, renewing the plaster every day, and washing the tumor at each time, with the above recommended decoction, and continue this until a cure is effected.

Recollect that few things contribute more to the healing of foul ulcers than keeping them well cleansed of the acrid, irritating matter: this should always receive particular attention. For this purpose you will find the carrot poultice excellent. It must further be recollect-
ed that the cancer is of a nature too obstinate, to yield immediately; and that a thorough, radical cure can only be effected by producing a total change of the cancerous habit or tendency of the fluids, which always requires the persevering use of remedies for some time.

For removing the luxuriant granulations of spongy flesh, commonly called "proud flesh," from the ulcer, some caustic has commonly been employed, though it must be confessed, not always with success; nay its ef-

fect has often been deleterious. A much safer, and it is said, a much more efficient remedy has been discovered, for we have never tried it, but have been assured by practitioners entitled to credit, that it is a certain remedy; yet it must be admitted, that medical science, which delights in farfetched, classic names for her caustics, and *poisons*, may effect a smile, and curl her lip with a sneer at remedies so unscientific, and ones not requiring the aid of chemistry, nor the skill of the apothecary to prepare them. The flesh of chickens, fresh killed, and applied whilst yet warm with recent life, will extract the poisonous, acrid matter from the ulcer in an astonishing manner, and will require to be changed in an hour or two, as in that time it will become perfectly rotten and corrupted. The skin of a cat has the same salutary effect; and fishing worms applied alive are not inferior to either, but like the others require to be renewed in the course of an hour, as they will be perfectly rotten in that time. Continue this application until the poison and life of the cancer are extracted, when the whole affected part of the tumor will become a dead mass, and may easily be removed, and without pain. Healing salves may now be applied to heal up the sore.

ULCERS.

By ulcer is commonly understood an old running sore, and it is in this sense that we here use this term, without regarding the unessential, scholastic distinctions of Nosology. Some are deeply seated in the flesh, and others follow slight wounds;—these latter usually heal in a short time, with proper attention.

TREATMENT.

In general, it will be necessary to apply some cleansing, antiseptic poultice, as the carrot or elm poultice, or

some similar one, to reduce the inflammation and cleanse the ulcer. When the inflammation is entirely removed, and the ulcer well cleansed, you may then apply some of the healing salves to soothe the injured part, and promote its healing more rapidly. If the ulcer be a large, or obstinate one, or the general health of the patient be much impaired it will be highly serviceable to employ the course of medicine, the tonics, and the decoction of the pipsissewa, wild lettuce, and the dock as directed in the treatment of the foregoing disease.

Under their proper heads, you will find several poultices and plasters described which will be valuable applications, for removing inflammation from the worst of ulcers. The poultices should be often renewed, and the ulcer should be washed at each renewal either with the decoction of the sour dock; dewberry brier root, or some astringent tonic article. This simple treatment, generally effects a cure of almost any kind of ulcer. When the edges of the ulcer are callous, some stimulating applications will be necessary, to increase the sensibility of the part, and the operation of the common applications;—washing occasionally with the tincture of lobelia will be found a most valuable treatment to effect this object.

SCROFULA, OR KING'S EVIL.

Scrofula commonly makes its appearance in small, round tumors under the skin, usually affecting those glands called the conglobate glands, in various parts of the body. These tumors commonly arise on the sides of the neck, near the ear, or under the chin; though they sometimes appear about the joints of the elbows, ankles, fingers and toes; rarely in other parts of the body.

Young persons are most liable to become the victims of this disease; its attacks on those who have attained maturity are rarely to be found. Children of lax fibers, with smooth, soft skin, fair hair, and delicate complexions

are more liable to attacks of this complaint than those of a different character. Scrofula is more prevalent in those countries where the atmosphere is cold and moist, and the atmospherical vicissitudes frequent and great.

As the scrofulous tumors grow larger, the skin which covers them, becomes of a purple or livid hue, with inflammatory symptoms. At length they break into one or more holes from which is discharged a white matter somewhat resembling curdled milk. This disease sometimes continues for years; and not unfrequently exhibits the body beset with tumors in all stages from their formation to those which are discharging matter.

Instances sometimes occur in which the bones, at the bottom of deep ulcers, become affected, which may generally be known by the black fetid discharges from the tumor, which is sometimes accompanied with pieces of bone.

TREATMENT.

The existence of this complaint in any individual, is a plain indication of a corrupt, morbid state of the fluids in the body. It must therefore be obvious, that the proper mode of treatment will be first to correct and purify the fluids, this will prevent the formation of other tumors, and aid the other remedies in effecting a cure of those already formed. The common course of medicine repeated as often as the obstinacy of the case may require; and the daily use of the laxative bitter tonic, taken two or three times each day, and combined with a small portion of the astringent tonic, will throw off the morbid matter, correct the fluids, and impart a healthy vigor to the system. Whilst using the proper means to purify the state of the fluids, particular attention ought also to be paid to the treatment of the tumors or ulcers.

The application of the drug poultice to a tumor in its forming state, will either terminate it by resolution, or bring it to a head, and promote a discharge of healthy pus. When a tumor has commenced running, the carrot or elm poultice, or any other cleansing, antiseptic

poultice should be applied to it to reduce the inflammation; and at each renewal of the poultice, the ulcer should be washed with some stimulating tonic washes to promote the cleansing of the part, and stimulate the languid vessels to a healthy action. For this purpose either the decoction of the dewberry brier root, the sour dock, the wild lettuce, witch hazel, or bayberry will answer. It is sometimes necessary first to wash the sore with mild soap suds, and then with one of the above named decoctions, to which it is often an advantage, if the ulcer be much inflamed, to add a little of the diaphoretic or antiseptic tincture. When the ulcer is deep seated, you should syringe the decoction into the bottom of it. When this treatment has removed the inflammation, and changed the discharges of matter to a more healthy appearance, you may then discontinue the use of the poultice, and apply some healing salve. The patient should continue the use of the tonic until an entire cure is effected;—his diet should be light, and nourishing. This course persevered in will generally conquer the most stubborn cases of scrofula; but if it is suffered to run on a great length of time without resorting to some efficient course of treatment, it becomes exceedingly difficult to cure.

FELONS.

Felons are inflamed, suppurative swellings, which appear about the joints of the fingers, attended with the most exquisite, torturing pain. Felons are supposed generally to originate from injuries that affect the periosteum or membrane which covers the bone. The disease appears to be seated between the periosteum and the bone itself; and if it is not arrested the bone often becomes rotten, when a portion of the finger, and sometimes the whole of it, must be lost. And instances are on record in which the corresponding bones on the back of the hand were so much affected by the extension of

the disorder, that they too were lost; and in some instances the whole hand has been involved in the infection so much that between it and the doctors' steel, the hapless patient lost his hand. There are two or three other kinds of this disorder, commonly called whitlows; but we deem it unnecessary to point out the discriminating peculiarities of each, as one general treatment is required for the whole of them.

TREATMENT.

Numerous remedies have been recommended and employed, for alleviating and curing this intolerably painful disease, such as holding the affected finger in boiling tallow, boiling lye, burning with caustic, and burning with red hot iron, &c. &c. All these remedies, to a man in health, bear the appearance rather of so many methods of torture, than so many means of relief; but to the suffering patient, whose agonies are so intolerable, they wear no terrors, while they offer the prospect of relief.

We are highly gratified that it is in our power to offer the public a new remedy for this torturing malady; and from the repeated trials we have made of its efficacy, we have no hesitancy in recommending it, as being the safest and most efficient remedy with which we have been acquainted, or ever known tried, if it is applied in time.

When ever you discover the approach of a felon or whitlow of any kind, make an immediate application of the drug poultice; (see page, 369;) and keep it moist, as often as it dries, with the antiseptic or diaphoretic tincture, or if these are not at hand, you may moisten it with spirits;—in the course of ten hours the poultice should be renewed. This poultice if applied in time, will not fail one time in ten to effect an immediate cure by putting it back; but if the poultice is applied too late to put it back, which may be known by its not relieving the pain, you must immediately lay open the part with

a lancet, making the incision to the bone, then apply the drug poultice, and it will soon remove all pain and all infection from the bone. When the infection is removed from the bone, which generally can be done by one application, you may then apply the elm, sumach, or carrot poultice until the inflammation is removed, then apply some healing salve to heal the sore.

It is a matter of great importance, in all cases of felonies, where they cannot be put back, to lay them open immediately to give vent to the matter as it is formed at the bone. This gives instant relief to the pain; and in many cases, it will not be necessary to apply the drug poultice after it is opened; but if there is any symptoms of the bone's being affected, you should forthwith apply the drug poultice, and that will obviate any danger of loosing any of the bones of the finger.

NEURALGIA, OR PAINFUL AFFECTION OF THE FACE.

This complaint is of the chronic character, and fortunately for the human family, it is of rare occurrence, for it is one of the most painful chronic complaints to which the human body is subject. The pain is generally seated in the nerves over the cheek-bone, in the ala or wing of the nose, upper lip, teeth, gums, forehead, temples, corner of the eye, &c.

This disorder usually comes on with acute, shooting pains, attended with convulsive twitching of the muscles in the part. Its attacks are quite sudden, the pain darts along the course of the nerves, and occurs in paroxysms of agonizing torture. The like affection of the nerves sometimes occurs in other parts of the body, as in the breast, foot, uterus, &c.

TREATMENT.

Physicians have long made it an object of attentive research, to discover some efficient remedy for this most

afflictive disorder. If such remedy has yet been discovered, it is in the botanic school. One of the usual remedies resorted to by the advocates of steel and calomel, is the dividing of the nerve between the painful part, and the brain;—this sometimes gives relief, but it often only shifts the attack to some other part, while the principal benefit, in such cases, derived from it, is a cicatrix disfiguring the patient, which is often rendered more ghastly by the contraction of the divided nerve.

On the first attack, take repeated doses of the nerve powders either in tea or tincture, with occasional doses of the antispasmodic tincture. The painful part should also be bathed with equal parts of bathing drops, and antispasmodic tincture. This treatment generally gives relief; but a return of the pain must be guarded against by employing a few courses of medicine, and the using of the bitter laxative tonic powders combined with a small portion of the astringent tonic powders to correct the secretions, remove the obstructions, allay the morbid irritation, and give a healthy tone to the system.

INCUBUS OR NIGHTMAR.

Nightmar occurs only during sleep; and comes on with a sense of weight and oppression at the chest, often accompanied with some distressing dream. During the presence of the attack, all the efforts of the patient to speak, or to move are ineffectual. Sometimes the oppression and anxiety are so extremely great, that the patient labors under serious apprehensions of suffocating; nor are such apprehensions entirely removed when the person is awakened. A few cases have been reported in which this complaint proved fatal.

Persons of a nervous temperament, of weak digestive powers, and costive habits, are most liable to attacks of this disease. Grief, anxiety, intense thought, late hours, and heavy suppers, are predisposing or exciting causes,

of this disorder. Nightmar appears to be a spasmodic constriction of the diaphragm, and muscles of the chest.

TREATMENT.

Where this complaint appears to proceed from weak digestive powers, the tonic cordial, or some tonic remedy must be resorted to for the purpose of removing this difficulty; and if costiveness prevail, means must be employed for its removal. (See treatment for costiveness.) The use of the nerve powders, or tincture, and the bitter tonic just before going to bed will generally obviate an attack of this disease.

Taking proper exercise, avoiding indigestable food, not indulging in hearty suppers just before going to bed, and preserving a cheerful, tranquil state of mind are parts of the regimen that must not be overlooked.

PALPITATION OF THE HEART.

This complaint is characterized by a violent, irregular action of the heart. During an attack, the motions of the heart are generally performed with greater force and frequency than usual in a healthy state, so that they may be felt with the hand, and can often be perceived by the eye. This complaint sometimes originates from a local, organic disease of the heart, or some of the large vessels in its vicinity; in this case, the palpitation of the heart may be regard as a dangerous symptom. But when it is symptomatic of the hysterics or some other nervous affection, which is generally the case, it easily yields to remedies.

TREATMENT.

Persons subject to attacks of this disease, should carefully avoid all causes likely to produce an attack of it,

such as fits of passion, sudden surprise, violent exertion, or great bodily fatigue.

A few doses of the nerve powders, or their tincture, and the daily use of some good tonic three or four times per day, will generally relieve the symptoms of this unpleasant complaint. One or two pills of *asafetida*, of ordinary size, may often be employed with great advantage. If the general health of the patient be bad, a course of tonics, connected with an occasional course of medicine, will be highly necessary, and very beneficial.

VERTIGO OR GIDDINESS.

This complaint is usually termed swimming of the head amongst the common people. In this complaint, every thing appears to be swimming round; the patient staggers, and feels himself in danger of falling down. Vertigo may originate from a foul stomach, dyspepsy, hypochondriasis, hysterics, and an over determination of blood to the head.

TREATMENT.

But little danger attends this complaint unless it proceed from an over determination of blood to the head. Where it originates from this cause, means should be immediately used to produce a revulsion of the blood from the head, and thereby relieve the brain by restoring a regular action in the circulation. To effect this, employ the means recommended for that purpose under the head of apoplexy. Where it proceeds from the other causes, the difficulty will disappear on the removal of the exciting causes; the proper treatment for which, you can find under their respective heads.

DEAFNESS.

Sometimes this complaint depends upon an original defect in the structure of the ear:—in this case it is in-

curable. Deafness or defective hearing may be occasioned by any thing that weakens or injures the auditory nerve; by loud noises near the ear, as the firing of a cannon; by bad colds affecting the head; by inflammation, or ulceration of the membrane of the ear; by hard wax interrupting the sound; or by too great moisture in the ear. It is sometimes caused by other diseases, such as fever, syphilis.

TREATMENT.

When deafness is occasioned by hard wax sticking in the ear, drop a few drops of neat-foot oil, or the oil for deafness, page, 383, into the ear; keeping the ear stopped with wool moistened with the same. If this does not remove the wax, a little antispasmodic tincture may be dropped in the ear. When the wax is loosened by this means it should be removed from the ear, either by carefully picking it out, or by washing it out with mild soap suds.

Deafness occasioned by too much moisture in the ear, indicates a derangement in the secretions of the organs, which may be corrected by the use of a few courses of medicine connected with the use of the tonics to restore tone and energy to the organic system. The ears should at the same time, be washed out with some astringent decoction, which should first be used about milk warm to cleanse the ear, and then cold to brace and strengthen its internal surface.

Dr. Thomas says tobacco smoke has been used with great success, even in cases of long continued deafness.

"The method of using it is to fill the mouth with the smoke of the strongest tobacco, instantly closing the mouth and nose, and the person makes an effort as if he meant to force the smoke through his nose which is prevented by holding the nostrils very tight; this forces the smoke through the *Eustachian* tube into the ear. These efforts must be repeated until one or both of the ears give a seeming crack, after which the hearing immediately returns."

HEAD-ACHE.

This complaint is characterized by a pain in the head;—sometimes the pain is general; at others, it is confined to some part of the head. When this complaint is accompanied with sickness at the stomach, it is generally called *sick head-ache*, and often, the *nervous head-ache*.

Head-ache may be produced by foulness of the stomach; costiveness, obstruction in the vessels of the head, long exposure to the direct rays of the sun, want of rest, sourness of the stomach, intense study, laying too long in bed, and by too great a determination of the blood to the head. Headache is often found as an attendant symptom of some other disease, such as fevers, hysterics, hypochondriasis, &c. This complaint always indicates a debilitated, or deranged state of the nervous system.

TREATMENT.

When this complaint is an attendant symptom of some other disease, it generally disappears on the removal of the other disease, which it accompanied. If it originate from a determination of too great a quantity of blood to the head, which may usually be known by the attack being sudden, very acute, and attended with giddiness, ringing noise in the ears, and sometimes with a loss of speech, it denotes an attack of palsy or apoplexy, which must be treated to produce a revulsion from the brain, as directed under the head of apoplexy, which see.

Head-ache arising from a sour stomach, is generally relieved by taking something to neutralize the acid and remove it from the stomach. For this purpose, use some of the articles recommended in the class of antacids pages, 302 and 303; and then follow their use with some good tonic to increase the tone of the digestive organs. (See *tonics*, pages, 317 to 326.) If a foul stomach be the cause, take an emetic to cleanse the stomach; and then a few doses of the nerve powders will be useful: attention should be paid to the bowels, keeping them regular.

When head-ache arises from costiveness, the removal of that complaint as directed under the head *costiveness*, will generally secure you immediate relief from the head-ache. The bowels should be kept regular by the bitter, laxative tonic, or any of the laxative articles to prevent a return of the complaint. The course of medicine will be found useful in all cases, which are too obstinate to yield to the above treatment.

HEART-BURN.

Heart-burn is characterized by an uneasy, burning sensation about the pit of the stomach, attended with sour eructations, flatulence, nausea, and sometimes vomiting.

This unpleasant complaint arises from a debility or inactivity of the stomach, or from a vitiated secretion of the fluids concerned in the process of digestion.

TREATMENT.

Relief may immediately be obtained by using some of the antacid preparations, pages, 302 and 303, as these medicines will correct and remove the acidity of the stomach. But if you want to eradicate the complaint, and effect a thorough cure, measures must be adopted to increase the tone and energy of the digestive organs, and secure a healthy secretion of the gastric and other juices concerned in the digestive process.

In most cases, the bitter tonic powders, the tonic cordial, or some tonic restorative, (see class of tonics, both in the *materia medica* and in the dispensatory,) connected with the antacids, will, if continued some time, using three or four doses a day, effect the desired object. But if the case be a very obstinate one, a course of medicine or two will greatly aid the other remedies, and promote the cure. The patient would do well to use the neutralizing sirup a week or two after the disorder is conquer-

ed, particularly, if he has been subject to attacks of the heart-burn. Using this sirup not only removes all acrid matter from the stomach, but it will secure a healthy tone and action in that organ. Bathing the region of the stomach with bathing drops, diaphoretic tincture, or some stimulating wash, often proves serviceable in the treatment of this complaint. Attention to diet will likewise be necessary; for all articles that ferment, or become sour on the stomach should be carefully rejected. All food should be well chewed before it is swallowed; this mixes a greater portion of saliva with it, which not only prevents its fermentation, but aids in its digestion.

HICKUP.

This is a convulsive or spasmodic affection of the stomach or diaphragm, supposed to arise from some peculiar irritation of the nervous fibers. Hickups are sometimes very troublesome, but not often a dangerous complaint, unless it is a symptomatic attendant of some other disease; for when hickups occur at the close of acute diseases or after mortification takes place, the symptom may be regarded as the forerunner of death.

TREATMENT.

Most cases of hickups may be cured by a few drinks of the blue cohosh, page, 129. The nerve powders either in tea or tincture, will likewise be found very good.

When this disease is produced by acidity of the stomach, remove that, as directed in the treatment of the foregoing complaint, and the hickups will generally disappear; and then the use of some tonic will prevent their return. If the disease arises from a weak stomach oppressed with unwholesome or indigestible food, the wine bitters, page, 323, or some good tonic, either simple or compound, will remove the difficulty. Sometimes a

table-spoonful of good strong vinegar, taken at small swallows has the desired effect. The application of something warm and stimulating to the region of the stomach has been found valuable; and in obstinate cases, the course of medicine has been resorted to with great success. A sudden fright or alarm often removes the disease instantly, without any medical aid.

TOOTH-ACHE.

This most excruciating and distressing complaint may arise from a decay of a tooth and a consequent injury of the nerve or marrow of the tooth; from a sympathetic nervous affection from some other diseased part of the system; from cold; obstruction of some evacuation; and from a rheumatic affection. A disordered state of the bowels and stomach sometimes gives rise to the tooth-ache of the severest and most excruciating kind.

TREATMENT.

If the tooth be hollow, and much decayed, the best plan will be to extract it, and prevent others from being affected with caries or decay in consequence of their vicinity to it; but if you do not wish to have the tooth pulled, put a little bunch of lint or cotton in the hollow, which has been steeped in the oil of summer savory, or oil of cloves. If there is pain in the jaw, or if the excitement about the teeth and jaws be considerable, stove the head as directed at page, 222. Bathing the cheek with pepper and vinegar, or bathing drops; applying a piece of brown paper wet with vinegar and sprinkled with cayenne, and holding in the mouth equal parts of the diaphoretic and antispasmodic tinctures, or chewing a small piece of the bark of Xanthoxylon or tooth-ache tree, will generally procure relief.

When the tooth-ache is merely the result of a sympa-

thetic nervous affection, or proceeds from a foul stomach, costiveness or obstructed evacuations, you must clear out the obstruction, and cleanse the stomach and bowels; after which a few doses of the nervine tincture will allay the nervous irritation, and ease the pain. Where the whole jaw is affected, the application of a poultice of the may-weed, or of mustard, or even of red pepper sometimes gives relief.

EAR-ACHE.

This complaint is characterized by a throbbing pain in the ear, which is sometimes not very severe, attended with little inconvenience, and ceases without a resort to medical aid. At other times, it is more violent, attended with excruciating, throbbing pains, and in some instances with delirium and convulsions: if not relieved, suppuration will take place, which is apt to injure, if not destroy the hearing.

Ear-ache or inflammation of the ear, generally proceeds from cold, or from those causes in general, which produce other inflammations.

TREATMENT.

In mild forms of this complaint, relief may generally be procured by wetting a little wool or cotton with the diaphoretic tincture, and putting it in the ear. Lard in which onions have been slowly fried so as not to scorch them, dropped in the ear, and then a little wool moistened in the same and put in the ear will be found an excellent remedy. If the patient has a bad cold, he should drink some diaphoretic teas, and promote a free perspiration by covering up in bed and placing a hot rock, wrapped first in wet cloths, and then a dry one, at his feet, and if necessary one or two may be placed at other parts of the body. This will relieve him of his cold, and his ear ache too, if he will be careful in cooling off, not

to expose himself so as to catch a fresh cold. An occasional drink of diaphoretic tea while cooling off, will be a good preventative of taking cold.

Sometimes it is necessary in severe cases to drop a little of the antispasmodic tincture in the ear, and then place a hot rock wrapped in cloths to the side of the head. If the inflammation of the ear runs high, threatening to suppurate, stove the head over good vinegar, directing the steam to the ear by means of a pipe; this will have a powerful tendency to reduce the inflammation. An antiseptic poultice applied to the ear, first putting a little wool in the ear, wet with the diaphoretic tincture, will also be good to remove the inflammation.

Ear-ache is sometimes produced by insects getting in the ear. They may be destroyed by dropping a little of the spirits of camphor, or diaphoretic tincture in the ear; and then syringe warm water into the ear, holding that side of the head downwards so that the water can run out freely, and thus the dead insect may easily be removed.

ITCHII.

This filthy disease is entirely a cutaneous one, and seldom affects the general health or constitution of the patient, unless permitted to run on a long time without due regard to cleanliness.

It may be produced by a want of cleanliness, or by the infection caught from others that have it. Its first appearance is made about the fingers in small pimpls, which soon extends to the wrists, arms, legs and waist. These pimpls soon assume a yellow appearance attended with great itching and consequent desire to scratch, which is much increased by becoming warm. Scratching breaks the pustules and communicates the matter to other parts of the body, and often makes the breaking out general.

TREATMENT.

This unpleasant, filthy disease is neither dangerous nor difficult to cure, unless improperly treated; for some unfortunate patients attempting to cure themselves with mercurial ointment, have, by catching a little cold, been salivated, and so badly affected in the bones and joints, that they have passed their miserable days, as the victims of an incurable disease.

The itch may be readily cured by drinking the *cleansing beer*, page, 391, or some good tea to cleanse the blood of impurities, such as burdock, narrow dock, sassafras, and the like, and washing with a strong decoction of the buckthorn, rattle weed, or narrow dock; or by rubbing with the itch ointment, pages, 367—8, or with the oil of spice berries, juice of poke leaves, or with an ointment made of the fresh root of elecampane stewed in lard or fresh butter.

Where the general health of the patient is bad in connection with the itch, he should, in addition to the above remedies, be carried through a few courses of medicine, and use some of the bitter tonics for the restoration of the general health.

CHICKEN POX.

This complaint is characterized by an eruption on the skin bearing some resemblance to the small pox of a favorable kind, and usually preceded by a slight fever. This disease, like the small pox, measles, and some other eruptive disorders, is said to affect the same person but once; and are supposed to depend upon what doctors call a specific contagion.

Sometimes the eruption is preceded by a chillness, which is succeeded by flushings and heat, pains in the head and back, thirst, restlessness, and a quick pulse; —at other times scarcely any symptoms except a slight fever precede the appearance of the pustules. About the third day they become filled with a watery humor,

which is never converted into yellow matter or pus, as is the case in small pox; and about the fifth day they usually dry away, leaving a crust or scab over each pustule, which however, seldom leaves a scar when it comes off, which takes place in a short time.

TREATMENT.

In general, but little will be necessary but drinking some diaphoretic tea to promote perspiration, and keep the eruption from striking in, and producing sickness.

A similar treatment will answer for the swine pox, which is considered a species of the chicken pox, and differing only in the size of the pustules; those of the swine pox being the largest. Keep the patient's bowels open; give him diluent drinks, and light nourishing diet.

MEASLES.

This like the foregoing disease is supposed to depend upon a specific contagion, and rarely attacks a person more than once.

An attack of measles is mostly accompanied with chillness, and shivering, which is succeeded by heat, thirst, pains in the head and loins, stupor and heaviness, redness of the face and eyes, swelling of the eye-lids, nausea and sometimes vomiting; there is also a dry cough, with hoarseness, hurried breathing, frequent sneezing, and a discharge of an acrid mucus from the nose. Between the third and fifteenth day, though generally about the third or fourth day, small red spots make their appearance about the face, neck and breast, and in a day or two more, they spread over the whole body. The spots do not rise in pimples, but may be perceived by the touch to be a little rough. On the appearance of the eruption, the cough, hoarseness, difficulty of breathing, watering of the eyes, and discharges from the nose

are aggravated; nor does the fever abate, as is the case in the small pox, when the eruption appears; but is often increased until the eruption begins to go away.

Measles is generally regarded as an inflammatory, infectious fever. This disease and the scarlet fever resemble so much that it is difficult to distinguish them; fortunately however, in the botanic practice, it will not be a very fatal mistake if you should be unable to distinguish the one from the other; for the treatment laid down for scarlet fever, will cure the measles. In scarlet fever the redness is more equally diffused than in the measles. The eruption in scarlet fever does not rise enough above the skin to be perceptible to the touch, but in the measles it does: in the latter the cough is more severe, the eyes more inflamed and watery, and the eyelids more swelled, than in the former.

Measles, when improperly treated, are dangerous, and are often succeeded as a consequence of bad treatment, or of catching cold, by immediate death, or by some other disease, as consumption, chronic diarrhea, dropsy, &c.

TREATMENT.

In all ordinary attacks of the measles, when the patient in other respects, is in health, drink freely of the tea of diaphoretic powders, or a tea of any of the articles in the class of diaphoretics; and keep the bowels loose by injections, or mild cathartics. This will generally cause the measles to strike out; and if the patient will observe the above or some similar treatment, and avoid exposure to cold, there will be but little danger.

But if there is an aggravation of the symptoms, and the eruption does not make its appearance, you must administer frequent doses of the sudorific powders, or if these are not at hand red pepper tea will answer; and place hot rocks wrapped in wet cloths about the patient, so as to produce a free perspiration, and bring out the eruption. Should this treatment fail to bring out the measles, or shou'd the patient catch cold and cause them

to strike in, as it is commonly phrased, you will find it the surest, and speediest way to carry the patient through a course or two of medicine, which never fails, unless the patient is already dying, to bring out the eruption, and mitigate the symptoms. Sustain the strength of your patient by the bitter laxative tonic, and with warm nourishing diets; and keep out the eruption by the use of the sudorific or diaphoretic powders.

Sometimes a spontaneous vomiting occurs in this complaint, which generally may be checked by giving an emetic of the lobelia, to remove all the acrid contents of the stomach; but if this should fail to stop it, employ some of the antiemetics, see page, 308. If diarrhea occur, treat it as directed for that disorder; and if soreness of the throat or inflammation of the lungs take place, treat them as directed for these complaints.

NETTLE-RASH.

This is a cutaneous, eruptive disease, and makes its appearance in lumps or whelks, which are whitish in the center, and red round the edges, similar to those produced by the stinging of nettles; hence its common name nettle-rash: in the technical language of the schools it is called *urticuria*. At first this complaint is attended with great itching, loss of appetite, nausea, sometimes vomiting, slight fever with unpleasant chilly sensations. This complaint is generally attended with little danger, if the eruption be kept out, and may very readily be cured.

TREATMENT.

Give the laxative bitter tonic in sufficient quantity to keep the bowels open, and some good diaphoretic teas to keep out the eruption; if you take some tea to cleanse the blood, you will greatly facilitate a cure. If the patient inclines to vomit, give him first, some antacid to

neutralize the acid in the stomach, and then give an emetic. Should the complaint prove obstinate, treat as directed in severe cases of measles. Diets should be nourishing and easy of digestion. Avoid exposure to cold.

ERYSIPelas, OR ST. ANTHONY'S FIRE.

All persons are liable to attacks of this disease; but females are more liable than males. It is generally regarded as an inflammation seated in the skin, mostly appearing on the face, legs and feet; though all parts of the body are liable to its attacks. In warm climates it bears a much more inflammatory character than in colder ones.

Erysipelas may be produced by irritating matter in the stomach and bowels; obstructed evacuations, as a sudden check of perspiration, stoppage of the menses, the drying up of ulcers, &c.; the application of stimulant, acrid matter to the skin such as blistering plasters; and exposure to cold during a course of mercury.

This complaint most frequently occurs in advanced life, though it is sometimes met with in early life. Persons of a sanguine, irritable temperament, are most liable to attacks of this disease; and those who have it once, are much more liable to be attacked again; for that peculiar condition of the system, which gives birth to it, is more apt to occur again, after it has once existed.

This disease generally makes its appearance in a red spot or blotch of the skin, which rapidly extends itself over the body, attended with burning and itching; and if the inflammation be high; there will be pains in the head and back, great heat, thirst and restlessness, with a slight swelling in the affected part; the pulse small and frequent; about the third or fourth day, a number of small pustules or blisters containing a clear, and sometimes a yellowish fluid make their appearance. If the disease be neglected, these blisters in bad cases some-

times terminate in obstinate ulcers, which rapidly tend to mortification. This complaint is usually most dangerous when it attacks the face; for the disease is not only attended with the unpleasant symptoms above described, but there is also great drowsiness, or tendency to coma and delirium, with a frequent, full pulse. Sometimes the whole face and eye-lids swell so as quite to deprive the patient of sight.

TREATMENT.

At the first onset of this complaint, use the diaphoretic powders, or some diaphoretic tea freely; bathe the feet in warm water, and avoid exposure to cold. This will keep the disease from striking inwardly. If you commence in time, and the attack be a light one nothing more will be necessary to effect a cure, unless it be, some gentle cathartic to keep the bowels open, which should, by no means, be neglected; and if they be very costive, a laxative clyster should be employed forthwith, and repeated until a copious evacuation is obtained.

But if the attack be a severe one, and the stomach be out of order, an emetic to cleanse it will be necessary; and in truth a course of medicine would be valuable. The heat and irritation of the inflamed part may be allayed by washing the part with a tea of slippery elm, or almost any antiseptic article; or by applying the elm or carrot poultice. The same may be effected by wetting cloths in cold water, applying them to the inflamed part; but if this is done, the patient must drink freely of the sudorific or diaphoretic powders, and keep up a perspiration by the application of hot rocks, to keep the disorder from striking inwardly. If symptoms of mortification appear, employ the means directed under that head to arrest it. An ointment made of fresh butter, spirits of turpentine, and balsam of fir is a most excellent application to remove the irritation and inflammation from the skin.

Diets should be light and nourishing. The patient

would do well to take some good tonic to increase the tone of the digestive organs.

SHINGLES.

Dr. Good supposes that this disease is a species of tetter; it is characterized by an eruption of blisters on some part of the trunk, appearing in clusters, and spreading round the body like a girdle.

An attack of this complaint is sometimes preceded by head-ache and nausea, but usually the first symptoms are heat, itching and tingling in some part of the body, which is covered with small red patches of an irregular shape, and upon each of these, there is numerous small pimples clustered together. In the course of twenty-four hours, these pimples become enlarged, and are perfectly transparent, being filled with a clear fluid. If the disease be not checked, other clusters will appear extending in succession with some regularity quite round the body. Sometimes they extend like a sword belt over the shoulder.

TREATMENT.

Shingles are not considered dangerous, unless accompanied with a bowel complaint, or an affection of the lungs.

In general, this complaint is readily subdued by drinking freely of the diaphoretic powders, or any diaphoretic tea to keep the complaint from striking inwardly; and by washing the affected part with the diaphoretic tincture, bathing drops, or with a strong decoction of the sour dock. Keep the bowels open with the bitter laxative tonic; if obstinate costiveness occur, remove it with laxative injections.

RING WORM.

This complaint shows itself in small red pimples, which break out in a circular form, containing a thin acrid humor. When the body becomes heated, these eruptions are accompanied with itching, and a sense of heat. This eruption does not often spread to any great extent; though instances have occurred in which it has so much affected the whole body, that the skin assumed a leprous appearance, whilst the patient was much disfigured by blotches, suffering great torment from the intolerable itching, and painful excoriation.

TREATMENT.

Ring worms very often disappear of themselves in the course of ten or fifteen days; but then they are apt to return again in a short time. Rubbing the part with equal portions of strong vinegar and salt three or four times a day, often effects a cure. Salt and water alone, used in this way is sometimes equally successful. The decoction of the yellow dock root, in which a portion of salt and alum has been dissolved, applied as a wash four or five times a day is very efficacious. The juice of the black walnut hull or husk, and the tincture of lobelia are also very good. Let the patient drink some teas to cleanse the blood, if these external applications fail to remove the difficulty.

TETTER, RUNNING TETTER.

This complaint is sometimes called tetterworm, or running tetter. It is an eruption of broad, itchy spots, which spread until they run into each other, and either form extensive excoriations of the skin, or terminate in bad ulcers. Sometimes the skin thickens, corrugates, and cracks, being very tender. In some, this complaint

is worst in the winter, in others it is worst in the summer.

TREATMENT.

An ointment made by stewing the jamestown weed, (commonly called jimson,) in hog's lard, to which add a small portion of burnt alum, has been found a good remedy for that kind of tetter which is worst in the winter.

The writer was cured of an obstinate case of tetter, which had run on three or four years, resisting all the skill of two doctors, by an ointment made of cedar oil and fresh butter. Beat up a portion of the red pucoo root and steep it in good vinegar, with this wash the affected part three or four times a day, until a cure is effected.

All external applications will sometimes fail to effect a cure, without the aid of internal remedies to cleanse the blood. Several articles valuable for this purpose may be found in *materia medica*; but if you want to do this speedily and effectually, use the vapor bath omitting the emetic, unless the stomach be foul. In connection with the vapor bath, you should use the bitter tonic, and any of the articles recommended as good to cleanse and purify the blood.

SCALD-HEAD.

This is an inflammatory, eruption in the skin of the head. It usually commences with a tingling sensation, as if something was creeping through the hair. Next it itches, and then numerous small whitish scales may be seen around the roots of the hair, under which, are very small ulcers discharging a whitish matter. At other times, it commences more boldly exhibiting clusters of minute, oozing, red prominences or pustules, dispersed throughout the hairy scalp; some advanced to suppuration, leaving pits filled with pus, presenting a honey-

comb appearance, interspersed with whitish or yellowish scales. In some instances large patches of scales matted in hair appear; in others, one large crust covering the entire head supervenes. In some, the scabs are firmly attached to the skin of the head; in others they fall off like bran. Some authors have divided this disease into several distinct species; but it is more generally believed that there is but one species of scald-head, and that the variety of forms it has assumed, originated from the difference of constitution, and other circumstances.

Children are most liable to attacks of this complaint, though the adult is not entirely exempt from it. Want of a due portion of wholesome food, neglect of cleanliness, or bad nursing may produce this complaint. It may also be propagated by contagion; it also descends as a hereditary disease. When this disorder occurs in connection with a scrofulous habit, it is exceedingly difficult to cure.

TREATMENT.

Where this complaint is merely in the skin it readily yields to a treatment with topical applications. First wash the head well with soap-suds, and then anoint the head once a day with an ointment made thus;—take equal quantities of black pepper and soot, and stew them in salt butter. Before each application of the ointment the head should be washed well with warm soap suds made with a tea of red or black oak bark, instead of water. During this course of external application the patient should drink freely a tea made of equal portions of yellow dock, yellow parilla and sassafras, or of any tea that is good to cleanse and purify the blood. He should also take daily, enough of the bitter laxative tonic to keep the bowels open. The head should be covered with the wilted leaves of the white pond lily, skunk cabbage, or the common cabbage; if these can not be obtained, keep it from the air with a cap or handkerchief.

Well's scrofulous ointment will also be found valua-

ble for this complaint. Washing the head with a decoction of the pond lilly, bayberry, or with the tincture of lobelia and diaphoretic tincture, is also good.

If the case appear obstinate, a resort to the course of medicince in connection with the above, or similar treatment, rarely fails to effect a thorough cure.

Diets should be light, wholesome, and nutritive, not embracing any dried and salted meats.

SCURVY.

By some writers this complaint is treated under three distinct heads, denominated *petechial*, *land* and *sea scurvy*. Other writers consider all these varieties as one disease differing only in degrees of violence.

Severe labor; weak, unwholesome diet; breathing impure air; great anxiety of mind; debilitating menstrual discharges; exposure to damp air, and living on salt provisions, may produce this complaint.

The usual characteristic symptoms of this disease are, the appearance of purple spots or eruptions first on the legs, afterwards on the thighs, arms, and trunk. These spots sometimes extend to the inside of the mouth, and appear on the tonsils, lips and gums. From these parts the hemorrhages first issue; and as the disease advances, blood issues from the nose, lungs, stomach, intestines, and uterus, accompanied with dropsical swelling of the legs.

In severer forms of this disease, the above symptoms become greatly aggravated, attended with excessive weakness; and the slightest exertion often brings on faintness, and sometimes immediate death. The patient appears so insensible of his real weakness, that he often attempts exertion, and frequently dies in the effort.

TREATMENT.

It will be extremely difficult to effect a cure of this distressing complaint without strict attention to the regimen and diet of the patient. All salted animal food must be scrupulously avoided, living chiefly on vegetables:—if any meat is eaten, it must be fresh. Alkalæscent vegetables will be the best;—scurvy-grass, water cresses, garlic, mustard, horse and common radish, lettuce, &c., may be eaten raw; beets, turnips, cabbage, parsnips, carrots, &c., may be prepared by the common process of cookery. Sour fruits generally, are useful. The patient's drink should be lemon juice and water sweetened with sugar; if this can not be had vinegar and water, and sour butter milk may be used, but it is not so good as the lemon juice, which has obtained great celebrity in the scurvy.

Having adopted this regimen, you must now direct your attention to the removal of the disease by the direct employment of remedies for that purpose. Many remedies have been recommended for this complaint by different medical authors; but one common misfortune attends the most of them, they want efficiency, except in mild cases.

In the early stages, and in mild attacks of scurvy, it may generally be cured by drinking a tea of the narrow dock root, burdock, or agrimony, in connection with the above recommended regimen. But in obstinate cases, in addition to the above treatment, employ repeated courses of medicine to clear out obstructions, and remove all impurities from the blood, and a course of tonics to restore a healthy tone to the organs. In administering the course of medicine, the emetic may be omitted after the first time, unless the general health of the patient, or the state of his stomach, should indicate the propriety of using it. For the tonics, the wine bitters, tonic cordial, or any of the bitter tonics may be used. Keep the bowels regular at one or two stools a day by the use of some gentle cathartic if necessary.

JAUNDICE.

Jaundice is characterized by yellowness of the skin, and whites of the eyes; by clay-colored stools: high colored urine, tinging things dipped into it of a yellowish hue.

This disease may be produced by any cause that obstructs the passage of the bile through its natural channel. The causes which may produce an obstruction of the biliary ducts are, gall-stones, inspissated bile, spasmodic constriction of the ducts, and pressures made by tumors in the vicinity of the ducts; hence jaundice is sometimes an attendant symptom of an inflammation or scirrosis of the liver or pancreas; and at times it is an attendant of pregnancy. The indulgence of anxious thoughts, or any of the depressing passions, the excessive use of ardent spirits, or a sedentary life, predispose the system to an attack of this complaint.

An attack of jaundice is indicated by great languor and inactivity; loathing of food, acidity of the stomach, flatulence, and costiveness. To these symptoms, which are often indicative of some other complaint, succeed others of a more specific character: the whites of the eyes, and then the skin become tinged of a deep yellow; the taste in the mouth, especially in the morning is very bitter, often attended with nausea and vomiting; the urine is high colored, imparting a yellow hue to linen when dipped into it; the stools are of a grey or clay color; a dull obtuse pain is felt in the right side, and in the top of the right shoulder, or in the shoulder blade. When the pain becomes acute, there is a full, hard pulse with other febrile symptoms.

When jaundice is produced biliary obstructions caused by gall stones lodged in the biliary ducts, acute pains are felt in that region at intervals, which are aggravated by eating, with great irritation at the stomach attended with frequent vomiting. The pain produced by the passage of a stone along the biliary duct is more acute than that attending an inflammation of the liver. Some-

times the patient is seized with a sudden and violent pain in the part where the duct enters the intestine, at times it shoots through the back and lower extremities. While this pain lasts, the patient can not lie down, but is compelled to sit up with his body inclined forward, which is the easiest posture he can find. The whole intestinal canal appears to be affected with the spasmodic action induced in the duodenum by the irritation of the gall stones.

When this complaint originates from biliary obstructions occasioned by the concretions called gall stones, there is no great difficulty in subduing the disease, if taken early and treated perseveringly. But when it originates from tumors in the neighboring parts, or from inflammation or scirrocity of the liver or spleen, it is much more difficult to cure; and if suffered to run on some time before remedies be employed it generally becomes incurable. In the last stages of this complaint, the whole system is often marked with black spots or streaks; in these cases after death, a dissection has detected nothing in the gall bladder but a vivid black bile, resembling pitch. At times more than a hundred gall stones have been found in some patients on dissection, and the gall bladder was distended to such an enormous size as to weigh eight pounds. Dr. Heister mentions the case of a woman in whom he found after death, a gall stone as large a walnut, and the biliary duct was so much enlarged that he could thrust the end of his finger in it. Vanswiten relates the case of his mother-in-law, who had for some time labored under this complaint. She was suddenly seized with a violent pain in the duodenum, followed by syncope, which lasted about fifteen minutes; at the end of two days, she voided a gall stone as large as the joint of the thumb, and two others not quite so large. After these were passed she soon recovered from jaundice.

Sometimes the efforts of nature to relieve herself, when the gall stones are too large to pass the common duct, causes irritation, and thence inflammation and ulcer.

ation are produced, and the adhesive process surrounds the whole with an impenetrable wall; for the parts being circumscribed by an effusion of coagulating nymph, so changed in its passage through the inflamed vessels, that it becomes quite a solid mass surrounding the abscess. When this occurs a cure need not be expected. See Dr. Sanders' treatise on disorders of the liver.

TREATMENT.

In the treatment of jaundice, the first intention should be to evacuate the intestinal canal of its viscid, mucous contents; and secondly, to restore a healthy tone to the mucous glands.

To answer the first intention, you would do well, first to produce a copious discharge of the alvine fæces by laxative tonic injections; then administer an emetic, which must be followed by a cathartic. Before you administer the emetic, you should give the patient two or three good doses of the diaphoretic powders to warm the cold, tough phlegm in the stomach, and with this he should take weak pearl-ash water, or white lye, to neutralize the acid, and loosen the phlegm: this being done, administer the emetic, which will now operate with more ease, and greater efficiency than it otherwise would. When the emetic is done operating, administer a cathartic; if you can get it, equal portions of hepatic aloes and rhubarb, will be best; (see these articles in *materia medica*;) but if you can not obtain these, use the butter-nut, or purgative sirup, see page 332. These must be repeated until there is a copious discharge of mucus; and the stools have changed their clay color for a yellow one.

To answer the second intention, you must employ a course of tonics; for if you do not use tonics when the mucus is discharged, the mucous glands being in an unhealthy, relaxed state, will soon renew the difficulty by pouring forth a fresh supply of vitiated mucus. For the tonics, use daily, three or four doses of the *antidyspeptic tonic powders*, page 324, and the *restorative tonic*

cordial, page 325. Pulverized charcoal administered in table-spoonful doses, once a day, has a very happy effect, in some cases of this disease, in cutting the tough, glutinous mucus, and preventing it from clogging up the alvine passage.

When there is considerable pain in the side, relief may be procured by the repeated application of flannel cloths hot as they can be borne, partially wrung out of a decoction made by boiling equal portions of tansy, catnip, hoarhound, mullen, worm-wood, and dog-wood bark in a quantity of water that will make the decoction strong. Rubbing or bathing the side with ether and spirits of turpentine, or with bathing drops, frequently affords some relief; and it is said, the first named article will dissolve the gall stones, or promote their discharge. Oil of worm-wood, and sweet oil combined, have the same effect, if the side be bathed with it, and the patient drink two or three times a day, a tea-spoonful of ether and the same of the spirits of turpentine combined. A table-spoonful and a half of pulverized puccoon root put into a quart of hard cider, and taken in doses of a table-spoonful, three times a day, has often been used with advantage. A tincture made of equal parts of wild cherry, dog-wood, and sarsaparilla, makes a valuable tonic in this disease; but a portion of bayberry added to it, renders it more valuable; for it then not only acts as a tonic, restoring tone to the mucous glands, but its mild astringent properties tend to diminish the secretions to their natural quantity.

In all obstinate cases, resort to the course of medicine, which must be repeated as circumstances require. This has had a most efficient, and salutary effect in cases of jaundice, that with the other treatment alone, seemed quite hopeless.

The patient's diet should be nourishing, and easy of digestion. Whenever the patient is able, exercise on horse-back should be taken; and every means used to secure tranquility of mind.

REMARKS ON INFLAMMATION.

Inflammation we regard as an imperfect or diseased action in some part, which is always attended with increased heat in the diseased part. A sudden loss of the tone, or obstruction of the vessels in any part, whilst the living power in the system remains apparently in full vigor, produces local inflammation. An obstruction, or loss of tone in the vessels in any part may be caused by a settling of cold in the part, by wounds, bruises, &c.; and this obstruction, and loss of tone in the vessels, renders them incapable of performing the living functions in a regular, and healthy manner, in that particular part. All inflammations therefore, must in proportion to their extent weaken the vital power.

Writers fond of speculating, and spinning theories, have labored to account for the phenomena of inflammation; and consequently various theories have been offered to the world to account for that augmentation of heat, which characterizes, and gives name to inflammation. No theory however, yet proposed has been fortunate enough to account for it, without wandering far from facts in the wild mazes of conjecture, and assuming principles, liable to some weighty objection, and even some that are palpably absurd.

The most popular, and commonly received theory of inflammation, amongst the *faculty*, as has been acknowledged to me by one of their diplomated members, is that inflammation is produced by "an increased action of the blood vessels, propelling forward a greater quantity of blood than usual into the affected part, by which means its sensibility and irritability are increased, its vessels distended beyond their natural tone, and the circulation through them rendered more rapid." Medical science nursed in the halls of learning, and dandled on the lap of philosophy, surely can not any longer claim the credit of that degree of penetration, which she has always heretofore exacted from a credulous world; for the exercise of a moderate share of common sense, will enable

any man to detect the absurdity of this theory of inflammation. This hypothesis presupposes the heart and arteries to be possessed of the power of discriminating so as to send a greater quantity of blood to the inflamed part, than to the other parts of the system; for if increased arterial action be the cause of inflammation, why is not the inflammation general, unless the hypothesis assume that the circulation is greater in one part than another, and thus producing inflammation in that part whilst the other parts receiving their ordinary quantity of blood, remain uninflamed. But is one fact furnished in the science of physiology, or of pathology, that affords the least testimony to support the proposition that the blood, which flows the whole length of the vessels, can flow faster in one part of the vessel than in another, and that too, according to the theory, the largest!! If the blood flowed rapidly through the largest part of the vessel, as this hypothesis supposes, would it not have to flow much more rapidly through the smaller part of the vessel in order to give vent to this rapid current in the distended part of the vessel. A late theory however, has been hatched to obviate this difficulty, which supposes that the vessels "exercise a power by which they, as it were, pump the blood from the larger arteries with increased rapidity." But this pitiful hypothesis only increases the difficulty; and adds another color to this picture of absurdity.

Again, if inflammation depended upon, and was produced by an increased action of the blood vessels, as this theory supposes, then would this symptom show itself first, whereas it is not detected until after inflammation takes place; and consequently this would be assuming that local inflammation was only symptomatic of a previous derangement of the vascular system!

The cause of that augmentation of heat which characterizes inflammation, is probably produced thus: The vessels in an injured part where inflammation occurs, instead of being distended are contracted, and their diameters, consequently in that part, are diminished. The

blood being driven through these contracted vessels must necessarily pass with greater rapidity, as it must pass through in a smaller column, this will increase the friction, and of course make a small increase in the quantity of heat in the part; and in addition to this, the obstruction of perspiration in the injured part, which acts, when going on as a regulator, must necessarily make an additional increase of heat in the part.

The limits of our work however, forbid us entering largely into the subject, so we for the present dismiss theorizing; and if we should be charged with having missed the right road, as well as the gentlemen of the faculty, we will have the consolation of not having traveled far in the dark maze of uncertainty.

INFLAMMATION OF THE BRAIN.

Inflammation of the brain, sometimes called phrensy, is sometimes a primary or ideopathic disease, but it is often only symptomatic of some other complaint. This complaint is characterized by a severe pain in the head, a high fever with redness of the face and eyes, watchfulness, intolerance of light and noise, and a violent delirium with a hard, full pulse.

Inflammation of the brain, or its membranes, is generally preceded by great anxiety, almost constant watchfulness, frightful dreams, indistinct recollection, extreme sensibility to the impression of either light or sound, pains first in the neck and back part of the head, which afterward extend to the whole head. At length a general and inflammatory fever announces the full formation of the disease. All the symptoms are now much increased in violence; a great restlessness, with deafness, confusion of ideas, ferocity of countenance, and violent ravings now prevail; the tongue is dry, rough, and of a black, or dark yellow color; the face is of a deep red; and the pulse is small and quick.

Causes likely to produce this complaint, are, excessive use of ardent spirits; indulgence in violent fits of passion; excessive venery; intense study; external violence about the head, as blows, or concussions; long continued exposure of the head to the direct rays of the sun; vicissitudes from great heat to cold; and the sudden suppression of the natural evacuations.

Inflammation of the brain is a very dangerous disease, whether it be symptomatic or ideopathic; and frequently proves fatal between the third and seventh day. When the disease is long protracted it often terminates in insanity.

TREATMENT.

The most active measures must be adopted at the very commencement of an attack of this disease, otherwise it is apt to prove fatal in a few days. I would first recommend a pretty active cathartic, and if it does not operate in the proper time, or if the bowels be costive, administer a laxative injection to procure a speedy evacuation of the contents of the bowels. During this time, the patient should take a dose or two of cayenne which tends to facilitate the operation of the cathartic; and its tonic properties aid in sustaining the living power, whilst its stimulant powers, operating upon the exhalents, tend to diminish the quantity of vitiated fluids. Cloths wet with vinegar or cold water should be applied to the head, and wet again as often as they become dry.

As soon as the cathartic has operated, carry the patient through a full course of medicine, having his feet in a vessel of warm water, during the time he is in the vapor bath, and continuing the cold applications to his head as above directed. The course of medicine must be repeated once a day as often as the symptoms require. Keep up a free perspiration between the courses of medicine, and do not neglect the cold applications to the head. In the mean time the patient must make a free use of diaphoretics and tonics. This treatment so far as it has been tried, has proved much more successful

in arresting this disease than the old plan of bleeding, blistering, &c.

Diet should be panado, milk porridge, arrow root, broth or soup;—drinks cool, and acidulated with vinegar, if preferred. Light and noise must be excluded, keeping the patient's mind tranquil as possible.

INFLAMMATION OF THE BLADDER.

This complaint usually comes on with a tenderness about the lower part of the abdomen, which soon becomes tight over the region of the bladder; the part now swells, accompanied with a violent pain, and is very sensitive to the touch, being remarkably tender. As the inflammation advances great difficulty is experienced in voiding the urine; sometimes it is entirely suppressed, or only discharged in small quantities, and every effort is attended with extreme suffering, with heat, scalding, and itching. If the disease is not checked, a general febrile disposition, with nausea and vomiting generally ensue, attended with a frequent, hard pulse.

Inflammation of the bladder may be produced by the use of improper acrid medicines, such as the cantharides, or Spanish fly; by inflammation of the venereal extending along the urethra or urinary canal, by spasmodic stricture in the part; by irritation from the lodgment of a stone; by hardened fæces, or by a diseased state of the prostrate gland; and by external injury over the parts.

TREATMENT.

If inflammation of the bladder originate from external injury about the region of the bladder, it may generally be relieved by bathing the part with the diaphoretic tincture, and then applying the elm poultice;—he should also drink freely of the tea of the diaphoretic powders. If this does not remove the inflammatory symptoms, in-

ject some elm or flax-seed tea into the bladder, (see directions for doing this, page, 199,) and you will be pretty certain to accomplish the desired object; it will be necessary however, that you keep the bowels open with cathartics or antiseptic injections.

If the complaint originate from hardened fæces in the rectum, evacuate the contents of the intestines immediately with a dose of the butternut sirup, and with injections repeated, until there is a free and copious discharge. Then take a few doses of the antiseptic tincture, and drink freely of the elm tea.

When the complaint originates from the lodgment of a stone in the neck of the bladder, you must attempt the dislodgement of the stone as directed under the head of *gravel*, which see. In the mean time, you may allay the inflammation by injecting the elm or flax-seed tea, as above; and by drinking the diaphoretic tea in connection with the elm tea and antiseptic tincture. Flannel cloths wrung out of a hot decoction of hops, and applied to the region of the bladder is valuable in relieving intense pain.

Should these means fail to afford relief, the full course of medicine must be resorted to forthwith, in connection with these remedies, and repeated often as the obstinacy of the case may require; and in this course, you will find the most certain, and speedy means of arresting inflammation.

INFLAMMATION OF THE EYES.

Soreness or inflammation of the eyes may be produced by external injuries; extraneous matter or dirt getting into them; exposure to cold winds, or catching cold; acrid fumes such as smoke; intemperance in drinking; reading or performing any kind of work by fire or candle-light, which strains the eyes, or in other words requires them to be closely fixed upon small, or dark objects;

and it is sometimes supposed to originate from an acrimony of the blood.

In some extreme cases of inflamed eyes, when the inflammation was not checked, suppuration has ensued, which ended in the complete destruction of the eye-ball, and a consequent loss of sight.

TREATMENT.

Soreness or inflammation of the eyes is usually treated by external applications alone; and it is to this circumstance, taken in connection with the different exciting or predisposing causes, that we are to attribute that failure of remedies so often met with in some cases, which proved successful in others. When inflammation of the eyes proceeds from cold settled in the system; from an acrid humor in the blood, &c., it will certainly be difficult to remove inflammation from the eyes by applications to them alone, while the predisposing cause still lurks in the system. But if means be employed to remove the exciting cause, the inflammation in the eyes will readily yield to proper external applications. Almost every one has his head stored with several valuable remedies for sore eyes; and when one takes the sore eyes the poor victim is doomed to run the gauntlet through the host of prescriptions that his neighbors furnish:—the matter of astonishment is not at the failure of the remedies, but at the ability of the eyes to undergo so many applications, and still retain their sight. The true indication therefore, that should be answered, is first to employ remedies for the removal of the cold, or the acrid humor from the blood, &c.; and then almost any of the following applications will remove the inflammation.

Steeping the pith of sassafras in clear water and apply it to the eyes by means of a cotton rag or piece of cloth, is considered an excellent remedy for inflammation of the eyes.

A decoction of golden seal applied in the same way, is highly extolled by some; and so is a decoction of dry

beach leaves, such as remain on the tree during winter.

Poultices of slippery elm or of lynn bark, bruised and moistened with cold water, and applied to the eyes has been found very efficient;—it should be renewed as often as it becomes warm.

Many valuable preparations may be found under the head *eye waters*, see page, 359. The writer would just remark that he has found a weak coperas water, used as a wash, one of the most efficient articles for removing inflammation from the eyes, that he ever tried except the elm poultice.

When the eyes remain weak and diseased after the inflammation is removed, the chronic eye-water, page, 360 will be valuable.

INFLAMMATION OF THE INTESTINES.

This dangerous complaint is characterised by acute gripping pains in the bowels, with a sensation of twisting round the navel, attended with nausea, vomiting, and obstinate costiveness with fever. It may be distinguished from colic by the hardness, smallness and quickness of the pulse, and by the greater tenderness of the belly, the pain being increased by pressure upon it, whilst in colic, this affords relief. As the inflammation advances, the vomiting increases, and the breathing becomes laborious, whilst the severity of the pain is much augmented; and if the disease is not checked, the intestines become affected with spasms, and the whole region of the abdomen is extremely painful to the touch, appearing as if drawn together in knots. At this stage the torture is indescribable, & if no efficient remedy is employed, a fatal termination will soon ensue; its approach is generally indicated by a sudden remission of the pain, a sinking and irregularity of the pulse, shrinking of the features, paleness of the countenance, coldness of the extremities, cold sweats, suppression of urine, distension

of the belly, hickups, convulsions, fluttering of the heart, and at length death terminates the period of existence, and suffering together.

TREATMENT.

A material difference obtains between the practice of the botanic physicians, and those of the faculty, in the treatment of this disease; and the results of their practice are equally different. With gentlemen of the faculty, the great reliance for a cure is placed upon bleeding and purging, and if the case be a bad one, a cure is seldom performed; but the botanic practitioner neither bleeds nor purges, and he rarely loses a patient in this disorder.

In the treatment of an inflammation of the intestines, the first indication to be answered, is to procure a free and thorough discharge of the hardened faeces from the bowels. This must be done by laxative injections repeated at short intervals, until a thorough evacuation is obtained. In the mean time the whole abdomen should be bathed with a strong decoction of pepper and vinegar:—this will both assist in reducing the inflammation, and promote the operation of other remedies. A part of each injection should be composed by steeping slippery elm bark in catnip tea:—this removes inflammation, and prevents mortification. As soon as the bowels are evacuated, carry the patient through a course of medicine. The vapor bath should be mild, often repeated, omitting the emetic after the first course unless the state of the stomach or general health should indicate the propriety of repeating it. During the operation of the emetic, apply hot flannel cloths wrung out of catnip tea to the abdomen.

The above treatment persevered in until all symptoms are removed, rarely fails to effect a speedy cure. Do not spare the elm and catnip tea injections, while any symptoms of inflammation remain. Purgatives

in this disorder only increases the difficulty; and two or three of them generally render a case incurable.

Persons who have had this complaint are exceedingly liable to take a relapse from the slightest causes. Indigestible food should not be used, and exposure to cold must carefully be avoided; and if costiveness occur, remove it immediately by injections.

INFLAMMATION OF THE KIDNEYS.

Inflammation of the kidneys is considered of two kinds. One of them is produced by the gravel or stone, which has been sufficiently noticed under that head. The other may be produced by external bruises, strains of the back, acrid, irritating substances in the blood conveyed to the kidneys, exposure to cold, &c. Persons of gouty habits seem to have a predisposition to attacks of this complaint.

This disease is usually attended with acute pain in the region of the kidneys, on one or both sides, extending along the ureter, accompanied with frequent desires to pass the urine, and great difficulty in voiding it; the bowels are costive, the skin is dry and hot; and sometimes nausea with vomiting, and colic pains occur.

When this complaint is suffered to run on, suppuration sometimes ensues, which is indicated by a dull obtuse pain in the region of the kidneys, with frequent returns of chillness and shiverings, after the seventh or eighth day. On the dissection of patients who have died with this complaint, in some instances the kidneys were quite destroyed by abscess; in others, though more rarely, they were scirrous, and greatly enlarged; whilst a few cases have been met with in which they were nearly wasted away with a consumptive affection.

Symptoms of a favorable termination, are, remission the pain, fever, and tension, followed by a copious discharge of high colored, mucous urine, free perspiration, or a flow of blood from the hemorrhoidal veins.

TREATMENT.

Relieve the costiveness by antiseptic injections, and bathe the affected part with a strong decoction of cayenne and vinegar; and then pursue a course of treatment pretty similar to that recommended in the foregoing complaint;—this will equalize the circulation, and throw off all morbid, irritating matter from the system. In addition to this, the patient should drink daily about one pint of the decoction of the leaves or bark of the peach tree; and three doses a day of the neutralizing mixture, see page, 303.

INFLAMMATION OF THE STOMACH.

Inflammation of the stomach is characterized by a burning heat at the pit of the stomach, accompanied with great oppression, and frequent retching:—a pressure over the stomach increases the pain. When any thing is swallowed, it is immediately vomited up. The mouth and fauces become dry, and the thirst is excessive. If the disease be not checked, it rapidly advances; the spirits become depressed; the countenance haggard; the pulse hard, small and quick; and the bowels costive. At length the countenance assumes an indescribably anxious aspect; the tendons twitch; the hickups ensue, and the patient dies.

Inflammation of the stomach may be produced by indigestible food; by receiving corrosive poisons into the stomach; by the translation of the gout or acute rheumatism to that organ; by drinking cold liquors when heated, &c.

TREATMENT.

The most active remedies should be immediately employed; for death, in twenty-four hours or less, may be the consequence of neglect. First use the injections directed for inflammation of the intestines, until a copi-

ous discharge of the stools be procured. In the mean time, employ the mint fomentation, and other antiemetic remedies, (see page, 308,) should be employed to check the vomiting. As soon as the stomach will bear it, give the patient warm, diaphoretic teas to drink, and apply the vapor bath as directed in inflammation of the intestines. Fomentations of camomile and catnip, should be applied to the region of the stomach between the applications of the vapor bath; and the elm tea should be freely drank, to allay the inflammation. If there appears to be any acrid matter in the stomach, it will be necessary to remove it by an emetic, which should be administered just after applying the vapor bath the first time. Should the inflammation of the stomach originate from the reception of poisonous substances into it, remove the poison as directed under that head.

INFLAMMATION OF THE PERITONEUM.

The peritoneum is the membrane that envelops all the different organs that are seated in the abdomen; it defends them from injury and prevents their whole mass from being displaced by their own weight.

Inflammation of this membrane is accompanied with symptoms so similar to those of an inflammation of the intestines that it is often difficult to ascertain which is the seat of the disease. An inflammation of the peritoneal membrane, may arise from the same causes which produce this complaint in the intestines; it is also met with sometimes in lying-in women whose labor has been tedious and difficult.

TREATMENT.

Treat this complaint pretty much as directed for inflammation of the intestines. Your principal reliance for a cure must be placed upon antiseptic injections; fomentations of camomile and catnip tea applied to the

whole region of the abdomen, and repeated applications of the vapor bath. Where this disease occurs in women, and originates from the last mentioned cause, it will be necessary also to give a few antiseptic injections at the birth-place to prevent inflammation from extending to the womb, and to aid in removing the inflammation from the peritoneal membrane. It will in general be necessary to give at least one emetic, which should be administered just after the first application of the vapor bath; you must then exercise some discretion whether it be proper to repeat the emetic.

At this place we take the liberty of introducing a preparation for an emetic, which has been politely furnished by Dr. Chambers of Mississippi. His method of preparing it is, first to make a tea-cupful of strong hemlock tea; into this put a tea-spoonful of imported ipecacuanha, and when well drawed, and cool enough not to scald, add a table-spoonful of the saturated tincture of the seeds of lobelia. Of this compound, give on table-spoonful every five minutes, until you have promoted vomiting as much as you judge necessary. This is the preparation that Dr. Chambers always uses in his practice; and he informs us that this preparation gives him the advantage of the remedial powers of the lobelia, while at the same time its operation is rendered so mild, as completely to prevent those symptoms which often alarm persons unacquainted with its operation. This discovery of the doctor's, will certainly procure for him, the sincere thanks of the botanic school, as well as those of thousands of the suffering sick, if it answer the very desirable purpose, that he informs us it will. We have not had an opportunity of trying it for ourselves, since receiving the above information; but we have full confidence in both the skill and veracity of Dr. Chambers; and he informs us he has tried it in almost every variety of disease for some years.

Dr. Chambers was first a regular bred physician of the old school; and practiced on that plan several years, with as much success as is common to the more skillful

class of the faculty; yet, he with Dr. Rush, and many other candid, skillful physicians, both witnessed, and lamented the uncertainty and inefficiency of the healing art as taught and practiced among the learned faculty; the popular practice being as Dr. Chambers, nervously expressed it, "in many cases, *worse than no practice.*" He now informs us that if lobelia and the vapor bath properly managed, were taken from him, he would not practice medicine for any consideration whatever. The first season after he purchased Dr. Thomson's books, out of 150 cases of fever, he cured 148; and in no case did it take him more than forty-eight hours to completely subdue the fever.

INFLAMMATION OF THE SPLEEN.

An attack of this complaint is indicated in its commencement by a heat, tenderness, and pain in the left side over the region of the spleen. The pain is generally acute, and is greatly increased by pressure. As the inflammation advances the part enlarges, and becomes indurated; and at times it proceeds to suppuration, forming an abscess.

This complaint may be occasioned by exposure to cold, external injury over the part, excessive use of vinous and spirituous liquors, &c.; and it is sometimes the result of long continued intermittents: in this last case it is vulgarly called ague cake.

TREATMENT.

To equalize the circulation, clear out obstruction, and throw off the morbid matter, employ the full course of medicine. If the bowels are costive, they should be relieved by antiseptic injections, before the patient enters the vapor bath; for this should be always remembered, that no person should be steamed while the bowels are costive, without first procuring a passage by means of

proper clysters. The side should be bathed occasionally with a strong decoction of pepper and vinegar, or with bathing drops; and hot flannel cloths wrung out of boneset or catnip tea, will tend to relieve the pain in the side, and aid in clearing out obstruction from the spleen, as well as reduce the swelling. The course of medicine must be repeated as often as the urgency of the symptoms require. During the whole treatment you may keep the bowels gently moved by exhibiting daily, a dose of the hepatic pills; see page, 331.

The patient's strength should be sustained by two or three doses every day of the tonic cordial, or some good tonic; and by light, nourishing diet. He must avoid exposure to cold, heat, or damp.

INFLAMMATION OF THE LIVER.

Of this disease there are two species, distinguished as the acute, and chronic inflammation of the liver. The former exhibits the ordinary symptoms of inflammation; but in the latter, they are scarcely perceptible. Some writers reject this distinction as unfounded in fact; and aver that they only differ from each other by the severity or mildness of the attack; with this latter opinion, we do not entirely concur, yet it is deemed unnecessary to occupy any more room at this place with the discussion of this subject.

Inflammation of the liver, whether acute or chronic, may be produced by exposure to sudden vicissitudes of heat and cold, by acrid bile, or biliary concretions, intemperate use of vinous and spirituous liquors, indulgence of violent passions, external injury, &c. Diseases of this character are of more frequent occurrence, in climates subject to sudden vicissitudes from hot to cool, and from dry to wet. This disease sometimes follows long continued intermittent, and remittent fevers; and of late years it has, very frequently, been produced by

that fearful scourge of suffering humanity, the use of mercurial preparations, administered under pretence of medicine.

Chronic inflammation of the liver is frequently so mild in its nature, and so obscure at its commencement, as to produce but little pain, and excite but little uneasiness, until its insidious grasp is firmly fastened. Its advance, however, is characterized at length, by loss of appetite, flatulence, a distension of the stomach with a sense of fullness; an obtuse pain with a sensation of weight about the region of the liver, extending to the back, side and shoulder; great aversion to motion; dejected spirits; sallowness of countenance; and costiveness with clay-colored stools. And if the disease is not arrested, jaundice, scirrocity of the liver, and dropsy are apt to ensue.

Acute inflammation of the liver is characterized by a pungent pain in the right side, and sometimes in the left; this pain is greatly increased by pressing upon it with the fingers. There is also a pain in the top of the right shoulder, extending at times to the clavicle or collar bone; also a dry cough, difficulty of breathing, with thirst; sallow countenance; high colored urine; either costive or relaxed; and sometimes nausea with a vomiting of bilious matter; the skin is hot; the pulse is hard, full and frequent; the tongue is covered with a white or yellowish fur of a mucous, sticky matter, producing a disagreeable taste, and a fetid breath.

The above are the symptoms that usually attend inflammation of the liver; yet different circumstances, such as climate, constitution, different degrees of severity. &c., vary the symptoms.

You can readily distinguish inflammation of the liver from that of the lungs, by the pain in the shoulder, by the yellowness of the skin; there is also greater difficulty of breathing in an inflammation of the lungs, and generally less expectoration of matter, than attends inflammation of the liver.

TREATMENT.

Inflammations of the liver are generally difficult to cure; and if cured at all, require a persevering use of the remedies, with a scrupulous attention to regimen and diet.

Commence the treatment by giving a dose of hepatic pills; and if the bowels be costive, aid the cathartic by antiseptic injections, until their contents are evacuated, thoroughly. Bathe the side with equal portions of ether and spirits of turpentine, or with bathing drops; after this is done, apply hot flannel cloths to the affected side, which have been partially wrung out of a strong decoction of pleurisy root, boneset, catnip, or something of the kind. This bathing, and fomentation must be repeated, as long as the pain in the side remains severe.

As soon as the cathartic is done operating, carry the patient through a course of medicine, which must be repeated every other day if necessary, and in some bad cases, it may be repeated every day. Between the courses the patient must take two or three doses every day of the *bitter laxative tonic*, page, 324; but instead of the bitter root, as in that recipe, he should add the same quantity of the black root, or more if necessary; for these powders should operate gently once or twice a day. Drink freely of the diaphoretic powders and keep up gentle perspiration. Do not neglect bathing the side and appling the warm fomentations to it, as long as the pain is severe.

At first, the vapor bath should be mild, and gradually increased until free perspiration is produced. After each steaming the patient should be speedily wiped off with a cloth wet with strong vinegar. The tonic powders must be regularly administered, and if possible the black root must be combined with them in sufficient quantity to keep the bowels gently moved:—much depends upon this, for few medicines if any in the compass of *materia medica* have more salutary effect upon the liver, without any bad affect upon the system. Eat ~~meat~~

the leaves of the dandelion like a salad in spring of the year, bleached like endive, or lettuce, is recommended as very valuable for indurations of the liver;—the juice of the leaves, and their extract, is good for the same.

Diet must be light and nourishing, consisting mostly of vegetables. Nothing should be eaten that will aggravate the disease. Avoid all exposure to cold or damp. The tonic must be continued after the patient begins to recover, until perfectly restored. Exercise and cheerful company are important. When ever the patient is able, he should take exercise on horse-back, or riding in a carriage; when not able to do this, let him exercise in a swing, where he will not be exposed to cold.

INFLAMMATION OF THE LUNGS.

Inflammation of the lungs, technically denominated peripneumony, is distinguished into two kinds, called catarrhal or true peripneumony, and spurious or bastard peripneumony:—the former is characterized by a thin acrid defluxion on the lungs, and the latter, by a viscid, mucous matter blocking up the vessels of the lungs. Both proceed from the same causes, and require a similar treatment. Aged persons are most liable to attacks of this last kind.

An attack of this disease is usually indicated by a dull pain some where in the chest or side, attended with difficulty of breathing, which is increased if the patient lie on the affected side; a hard cough, sometimes dry; hot skin; thirst, anxiety, and flushings of the face. The pain in the chest is increased both by coughing and by drawing a long, full breath; the pulse is hard, frequent, and contracted, vibrating under the finger like a tense string.

Whatever suddenly obstructs perspiration, as great vicissitudes from heat to cold, wearing wet clothes, or sleeping in damp beds, &c., may produce this complaint;

it may also be occasioned by great and continued exertions in speaking, singing, or blowing wind instruments; by excessive use of fermented, vinous or spirituous liquors; by the sudden repulsion of eruptions, and suppression of accustomed evacuations. The winter and spring are the seasons of the year when inflammation of the lungs most frequently occur.

When this disease is not seasonably relieved, the inflammation sometimes proceeds with such violence as to threaten suffocation, which in some instances, does actually occur, if the collection of matter burst into the air vessels or cells; at other times the matter is spit up fast as it collects.

TREATMENT.

At the very onset, the most energetic measures to check inflammation, should be adopted, as this disease sometimes runs its course, and proves fatal in a few days.

If the bowels be costive, you should first administer a laxative clyster, and relieve them. While this is doing, prepare the patient for receiving the vapor bath by giving him alternate doses of pleurisy root, and diaphoretic tea; this will tend to check inflammation, promote expectoration, and relieve the difficulty of breathing. As soon as the patient has taken three or four doses of the above named teas, carry him through a course of medicine, which must be repeated every day while circumstances require it. After the emetic is done operating, give a dose of the butternut sirup. Between the courses of medicine keep up gentle perspiration by a free use of the tea of pleurisy root, and of diaphoretic powders, and by keeping hot rocks at the feet. The chest or side where the pain is, should be frequently bathed with a strong decoction of cayenne and vinegar, and a rock should be kept near it; or it may be bathed with the bathing drops. Inhaling the vapor of vinegar and water into the lungs hot as can be borne, has in many cases, given relief both to the pain and difficulty of breathing; it has a salutary effect in promoting a resolution

of the inflammation. Put equal portions of good vinegar and water into a coffee pot, so as not to fill it up to the spout; then drop a small red hot rock into it, and shut the lid; hold the spout near the mouth and inhale the vapor hot as you can bear it; if it is not too hot inhale it from the spout itself. This process should be often repeated, while the pain and difficulty of breathing are present.

The author relieved one severe case of inflammation of the lungs, which did not yield to the usual remedies, even after the patient and most of his friends, had pretty well given up all hopes of his recovery, by administering repeated doses of the tincture of lobelia. The plan employed, was to give as much as the patient could bear not to vomit him, and as soon as the nausea was entirely gone, repeat the dose; this must be continued until there is an alteration of the symptoms. Nothing else should be drank by the patient whilst taking the tincture, as the quantity necessary to have the desired effect, will vomit, if any thing warm should be drank during the time. In the case above aluded to, after the patient took the second portion of the tincture, the pain in the chest, which had been very severe, began to spread; this at first alarmed the patient, who thought it a fatal symptom, but it was not long after it began to spread, until it entirely disappeared, and the difficulty of breathing was much relieved. From that time on, the patient recovered rapidly. After the inflammation is removed, the patient should use the tonic cordial, or some good tonic to restore tone to the system, and he should carefully avoid every cause likely to produce a relapse. Diet should be light, and nourishing.

INFLAMMATION OF THE THROAT.

This disease is frequently met with during the winter and spring, especially among persons of a full habit.

Mild cases of this complaint are usually termed sore throat; but if it proceed further, and threaten to suppurate, it is then often called quinsy.

This affection of the throat may be produced by exposure to cold, sudden vicissitudes of temperature, sitting in a current of air, wearing damp clothes, sitting in damp rooms; it may also be occasioned by violent exertions of the voice, blowing on wind instruments; or from peculiarity in the state of the atmosphere; if it proceed from this last cause it generally prevails epidemic ally.

An attack of this disease is indicated by slight shiverings and flushings, attended with a difficulty of swallowing and breathing; inflammatory symptoms are perceivable in one or both tonsils, in the palate and neighboring parts, manifested by soreness, redness, and swelling in the parts; dryness in the throat; hoarseness of the voice, and a burning sensation in the affected part accompany.

If the disease be not checked, it rapidly advances being characterized by an increased severity of the symptoms; the above described symptoms all assume a more aggravated character; the speech becomes indistinct; tongue swells, and is incrusted with a dark fur; the pulse is full, hard, and frequent; the cheeks swelled and florid; the eyes are inflamed; and in very bad cases, coma, deafness, and delirium sometimes occur.

TREATMENT.

If taken in time, you will find but little difficulty in the successful treatment of this complaint. In mild cases, and in the early stages, a tea of witch hazel, bayberry, or white pond-lily, with about a fourth of a tea-spoonful of cayenne added to each dose, will generally remove the complaint. In cases of a more obstinate character, drink freely of the diaphoretic powders, gargle the throat with a tea of bayberry, and slippery elm, or with a tea of catnip, and golden seal; and bathe the ex-

ternal part with a strong decoction of cayenne and vinegar, or with bathing drops frequently; and apply to the neck flannel cloths wrung out of a tea of catnip or camomile, or simply out of hot water. A free perspiration should be produced and kept up until there is an abatement of the symptoms. Inhaling the vapor of water and vinegar as directed in the foregoing disease, has a very salutary effect in checking the inflammation, and relieving the pain, and difficulty of breathing. In addition to these means employ the course of medicine if the violent character of the attack should require it, and it must be repeated if necessary. The bowels should be kept open, and it is a very good plan to administer a stimulating injection in the commencement, and relieve the bowels at once. The drug poultice, page, 369, or the astringent elm poultice, page, 370, applied to the throat, will have a most powerful tendency to remove inflammation. A gargle of the tincture of lobelia, and tincture of myrrh, page, 385, may be used in very bad cases with great benefit.

By adopting the above means early, and applying them perseveringly, you will in general prevent suppuration from taking place in the tonsils; but if suppuration is likely to occur in spite of your efforts, do not forget to apply the drug poultice to the throat, as that will terminate the suppuration more speedily than any thing else with which we are acquainted, and as soon as the tumor breaks there is instantaneous relief of the pain; and all inflammatory symptoms soon disappear.

INFLUENZA, CATARRH OR COLD.

The inhabitants of every country are liable to take cold when the seasons are variable, and the vicissitudes from heat to cold are sudden. Persons of a delicate constitution, and those who have a morbid susceptibility of the impressions of cold, and are disposed to be

troubled with coughs, are most liable to be affected by such transitions from heat to cold.

This complaint is caused by a sudden reduction of temperature in the body, or some part of it, which obstructs perspiration; and this becomes a general cause of disease.

Cold or catarrh usually indicates its presence by a sense of weight in the head, and oppression at the chest; a stopping up of the nose; watery and inflamed eyes; chills succeeded by flushes of heat; pains in different parts of the body; an increased secretion of mucus from the nose, throat and lungs, owing to a slight inflammation of the mucous membrane in these parts; and in most instances there is some degree of fever.

This complaint often prevails epidemically, and it is then called influenza by medical writers.

TREATMENT.

With proper treatment, taken in time, there is but little danger attending this disease, and but little difficulty in curing it; but when neglected, it often becomes the foundation of some of the most incurable disorders with which the human family is afflicted: it is therefore a matter of great importance to the future health to take early measures to remove this complaint when it is easily done.

Bathe the feet and legs in warm water fifteen or twenty minutes, just before going to bed; then wipe them dry carefully, and get immediately into bed. After you have gone to bed, drink freely of pennyroyal, sage, mint, or hoarhound tea, or the diaphoretic powders. In most mild cases, with sufficient care to avoid exposure to cold, this will remove all difficulty. If troubled with a cough, take some of the articles recommended for coughs:—by looking at the index, you will be referred to many valuable articles, some of which you can possibly find at hand. Keep the bowels open. If the case prove too obstinate for the above treatment, employ the full course of medicine, and repeat it if necessary. This

will break the hold of the disease, and effect an immediate cure.

MALIGNANT SORE THROAT.

This dangerous disease is sometimes called *putrid* or *ulcerous* sore throat. It is characterized by soreness of the throat attended with fever, stiffness of the neck, and inflammation of the fauces or back part of the mouth, rapidly tending to ulceration.

An attack of this complaint is usually indicated by chills succeeded by heat, nausea, and sometimes vomiting; restlessness, great debility; flushed face; inflamed eyes; stiffness in the neck; soreness of the throat, with hoarseness of the voice; and upon examination you will find that the whole internal surface of the throat, and mouth exhibits a fiery red appearance, interspersed with brown or ash-colored spots, which soon become so many ulcers discharging an acrid matter; a similar matter runs from the nose, and escapes at the mouth, excoriating the neighboring parts. At this stage of the disease, the breath is very offensive; and the tongue is covered with a thick, brown fur. There is generally a purging, and in many cases a frequent discharge of excoriating fluid matter from the fundament; the debility is now much greater; the pulse is small, frequent, and often irregular; the fever and other symptoms, are obviously increased in the evening:—in the morning, some slight remission takes place. Large spots or blotches, about the second or third day, appear on the face, neck, arms and breast, which gradually spread over the whole body. This eruption after continuing out a few days, disappears without effecting any remission of the aggravated character of the symptoms.

If the disease is not checked, the ulceration corrodes deeper and deeper, extending down the alimentary canal; the ulcerated parts become gangrenous; a severe purging ensues, and the ebbing tide of life ceases to flow.

This fatal termination of the disease, sometimes occurs as early as the third day, and rarely later than the seventh.

The malignant sore throat is generally supposed to arise from some specific contagion of a highly infectious nature; and hence it sometimes prevails as an epidemic. Children and persons of a relaxed, delicate habit of body, are most liable to be the victims of this disease. During autumn and the early part of winter, especially, when preceded by a dry, hot summer, putrid sore throat is most prevalent. Neglect of cleanliness, want of proper ventilation, eating damaged provisions, breathing air loaded with noxious vapors, and whatever tends to produce putrid fevers, will predispose to an attack of this complaint; it is sometimes, an attendant of measles of a malignant character.

TREATMENT.

First relieve the bowels of their putrid contents by injections, and keep them regular through the whole treatment by the same; for one active purge in this disease, would endanger the life of your patient. Whilst the injection is operating, prepare the patient for a course of medicine, by giving at short intervals, three or four doses of the diaphoretic powders;— now apply a gentle vapor bath, and continue it until copious perspiration is produced; then hastily wash off the patient's whole body with equal portions of the ooze of red oak bark and vinegar; put him immediately in a clean bed, and keep up the perspiration. An emetic must now be administered, and after its operation, repeat the injection.

The patient should take a dose of some astringent tonic every two hours, such as birth root, bayberry, dewberry, or the astringent tonic sirup, page 320. The tonic tincture, page 380, may also be used with advantage. The mouth and throat should be frequently gargled or washed with two parts of the antiseptic tincture and one of the tincture of lobelia; this has a very salutary effect

upon the ulcers, cleansing them and checking their tendency to mortification. The pepper sauce is also valuable for the same purpose, though not quite so powerful as the first. The pepper sauce however, in connection with the astringent tonics, is very valuable to prevent mortification; and it may be used alternately for that purpose.

If the disease be not checked in twenty-four hours, you must repeat the course of medicine, as above directed, as often as the case may require; but if you have not neglected to commence in time, it will be seldom necessary, for this disease rarely withstands the above treatment twenty-four hours perseveringly applied, unless it has run on too long before taken in hand.

Inhaling the vapor of vinegar, as directed for inflammatory sore throat; bathing with the same drops, and applying similar poultices as recommended for that disease, may be employed with advantage in this. A poultice of onions or garlic, (see article onions, page, 222,) has done wonders in the cure of this disease.

The strength of the patient must be supported by a generous, nourishing, and easily digested diet, comprising but little if any animal food. The patient's apartment should be kept clean and well ventilated without exposing him to any direct current of air;—the air should be disinfected by sprinkling vinegar, or some other disinfecting agent, about the room, as directed in cases of putrid or typhus fever.

MORTIFICATION.

Wounds whether incised or contused, inflammations, ulcers, and several diseases have direct tendency to terminate in mortification;—the incipient stage of mortification is called gangrene.

Mortification, in any external part, is characterized by the part becoming of a dark or black color, and exhibiting a fibrous or thready appearance, destitute of

natural heat, sensation, or the power of motion; for the part when mortified is perfectly dead. Gangrene or the incipient stage of mortification is indicated by a sudden abatement of the severity of the pain and fever in any inflamed part, for inflammation in every case precedes gangrene; a livid discoloration of the part, changing from a yellowish to a greenish hue, next a detachment of the cuticle or external skin from the inner skin, under which a dirty looking water collects; and a crackling noise is made by touching any part of it, by the air collected in the cellular membrane.

In putrid diseases as fevers, sore throat, dysentery, and internal inflammations, terminating in gangrene and then mortification, the symptoms so far as visible, bear a common and general resemblance to those exhibited in external mortifications. Where internal inflammation is about to terminate in mortification, there is a cessation of pain and fever; the pulse becomes small, weak, and irregular; the face assumes a cadaverous or deathly appearance; the extremities grow cold; clammy, cold sweats cover the whole body; the patient manifests great disposition to sleep, and seems to labor under great debility, which increases until the patient quietly sinks into the sleep of death.

TREATMENT.

If inflammations were properly and seasonably treated, gangrene and mortification would rarely, if ever occur; but as this is often neglected until symptoms of gangrene actually make their appearance, it is proper to prescribe for its treatment. Whenever the symptoms of gangrene begin to make their appearance, the most active and efficient remedies must be adopted at once, and perseveringly employed until the symptoms disappear. Amongst the foremost of these, is the course of medicine; for said an experienced practitioner, a few weeks since, "There is no process in the healing art, that possesses so much efficacy in clearing the system of

morbid, putrescent matter, and checking the advance of mortification, as the course of medicine." The course of medicine must be repeated as often as the circumstances require. The vapor bath should be applied at least twice the first twelve hours, omitting the emetic the second time. Between the courses of medicine the patient must drink freely of the diaphoretic tea, and of the tonic cordial, tonic sirup, or some good tonic; this will aid in promoting perspiration, clearing out putrescent matter, and restoring a healthy tone to the organs. The wine bitters will be found a valuable tonic in this case; and the tonic tincture, page, 380, is perhaps as good as any other. A tea of wild indigo, or slippery elm; or the antiseptic decoction, page, 316, may be occasionally drank.

Besides the above remedies, it will be necessary in most cases to employ in connection with them proper external applications. Bathing with the antiseptic tincture, page, 314, or with bathing drops; and applying antiseptic poultices will be found very valuable remedial agents in checking mortification. We will recommend several good poultices, and such as you find most convenient to be had, may be used.

Where there appears to be a general tendency to putrescence, as is sometimes the case in putrid fevers, the antiseptic poultice, page, 391, applied as there directed, has an astonishingly good effect in removing the symptoms of putrescence. The antiseptic poultice, page, 368, prepared and applied as there directed will be found most excellent to prevent mortification; so will the elm poultice, page, 370, and the yeast or alkaline poultice, page, 371. A poultice made of the bruised root of wild indigo, boiled, and thickened with rye or corn meal, with a little cayenne sprinkled over it, has been highly recommended.

Poultices should be frequently renewed, and if the part to which it is applied be ulcerous, at each renewal, the ulcer should first be washed with soap suds, and then with a decoction of red oak, dewberry, white pond lily, or some good astringent articles.

MUMPS.

Mumps are characterized by a swelling on one or both sides of the neck and face at or near the angle of the jaws, affecting the ligaments and muscles, which connect the upper and lower jaws, and extending to the parotid and maxillary glands.

This disease depends upon some peculiar contagion, and the same individual is liable to it but once; and although the inflammation is rarely attended with a considerable degree of fever, yet the external swelling is generally large, and the pain severe, particularly on moving the jaws or attempting to swallow.

Like other inflammatory infections, this complaint usually comes on with chills, nausea, vomiting, pain in the head and back with other slight febrile symptoms, which are succeeded by a swelling of the parotid and maxillary glands. Instances have occurred, in which, the swelling suddenly subsided with an increase of fever, when the disease was transferred to the breasts if the patient was a female, and to the testicles if a male. With proper care in avoiding exposure to cold, the swelling usually disappears in a few days, without suppurating or forming matter. In a few instances, the swelling about the throat has suddenly subsided with an increase of fever, and the disease fixed itself in the head, producing delirium, and was attended with fatal consequences.

TREATMENT.

In most cases, all that is necessary is to avoid exposure to cold, and keep the parts warm by the application of warm flannel cloths, and keep the bowels gently open with clysters or mild cathartics.

When the attack is attended with considerable fever, nausea and vomiting, it will be proper to cleanse the stomach with an emetic, and drink some diaphoretic or sudorific teas, in connection with other means to promote perspiration; the part affected with swelling should

be bathed with the relaxing ointment, page 365, or volatile liniment, page 368. But in severe cases, or when the disease has been transferred to the breast, or testicles, or head, resort must be had immediately to the course of medicine, which must be repeated as often as circumstances require, omitting the emetic after the first time, unless the state of the stomach, or the general state of the patient's health should indicate the propriety of repeating it. Between, and after the course of medicine, let the patient drink freely of the diaphoretic powders and the bitter laxative tonic powders. Bathing the neck and jaws with tincture of cayenne or applying a mustard poultice to it, while at the same time the part to which the disease is transferred should be bathed with cold vinegar, and treated with cold flax-seed poultices, which must be renewed as often as they become warm. This generally, if sufficient care is taken to avoid exposure to cold, will remove the complaint from the breasts or testicles as the case may be, and in a few days it will entirely disappear from about the neck and jaws. The elm poultice, the white bean poultice, or the sumach poultice applied to the breasts or testicles, have also been recommended as valuable to remove the swelling from these parts.

HEMORRHOIDS OR PILES.

Of this painful, distressing complaint there are two forms, distinguished as the *bloody* and *blind* piles. This complaint is characterized by small tumors rising on the verge of the fundament, which are sometimes round, distinct and prominent; but at others, they run into each other. When there is a discharge of blood from these tumors, particularly on going to stool, the complaint is called the *bloody piles*; but when the tumors discharge no blood, it is termed the *blind piles*. There is often a sense of weight in the back and lower part of the belly, together with a pain or giddiness in the head, sickness

at the stomach, flatulency in the bowels, and generally fever. A pungent pain is experienced on going to stool, and small tumors may be felt projecting beyond the verge of the fundament. Should these break a discharge of blood takes place, and the patient experiences some mitigation of the pain; but if they do not break great agony is experienced during every motion; and great inconvenience is experienced in sitting down on a hard seat.

Sometimes this complaint is seated some two or three inches up the fundament or rather up the rectum, and appears either in small tumors, or in a raw ulcerated condition; or it sometimes appears in a dry, hardened, cancerous state, called scirrous.

Piles may be occasioned by continued or habitual costiveness; by frequent drastic purges of aloes; by hard riding; excessive drinking; suppression of some accustomed evacuation; exposure to cold; and by pressure of the womb in a state of pregnancy, on the rectum. In many persons there appears to be a hereditary or constitutional predisposition to be afflicted with the piles:—such persons are apt to be visited with a return of the complaint frequently through life, or perhaps, they are never entirely clear of it.

If the complaint be allowed to progress to suppuration, which it sometimes does, it is apt to terminate in what is called a sinous ulcer or fistula.

TREATMENT.

If the bowels be costive, first relieve them by laxative injections; and you must keep them gently open by repeated injections. The use of the laxative bitter tonic has been highly recommended in this complaint. Bathe the part with the antiseptic tincture and applying mullein leaves hot as they can be borne, which have been wilted in boiling water, renewing the application as often as it becomes cold. Bathing or washing the part with a decoction or with the ooze of red oak bark will be found valuable when the rectum is protruded. A-

nointing the part with the sumach salve or ointment, or with an ointment made by stewing the bruised leaves of jamestown weed in hog's lard is very good, and if the disease extends up the rectum, moisten some cotton well with the above ointment and push it up the rectum, and let it stay some time, then take it away and renew the application. Cotton wet with the decoction of dewberry brier roots, and of alum root, is also good, particularly in cases where the rectum protrudes.

In very bad cases it may be necessary to employ a few courses of medicine in connection with the above or some similar treatment.

PLEURISY.

An inflammation of the pleura or membrane that lines the thorax is called pleurisy. This disease is characterized in its commencement, by chills and fevers, great thirst, and restlessness as in the inflammatory fever. These symptoms are soon followed by others of a more specific character. The patient begins to feel a sensation of weight or oppression in the chest, which soon becomes an acute pain in the side, generally about the sixth or seventh rib, and from thence darting to the fore part of the breast bone, or towards the shoulder blades, or back bone; the breathing becomes very anxious and difficult, and the pain is increased at every inspiration; and the patient finds himself incapable of lying on the affected side. The tongue is white; the bowels rather costive; the urine high colored; the pulse hard, contracted, and frequent, vibrating under the finger like a tense cord; and a cough usually dry and harsh at first, but afterwards accompanied with an expectoration of a viscid tough phlegm.

Causes which predispose to an attack of this disease, are, exposure to great and sudden vicissitudes of the atmosphere; wearing wet clothes, or lying in damp beds; violent exercise, and afterward cooling too suddenly;

continued and great exertions in speaking; singing, or playing on wind instruments; the repulsion of an eruption, or the suppression of accustomed evacuations.

This disease most frequently occurs in the winter and spring; but may occur at any season of the year. If it be neglected, or continue long, the inflammation extends to the lungs, and renders the disease much more difficult to cure; or it may end in the consumption.

TREATMENT.

First evacuate the contents of the bowels with anti-septic injections. Whilst this is doing prepare the patient for the course of medicine by giving him three or four doses of diaphoretic tea, of which pleurisy root should form a part. Carry him through the full course of medicine, which must be repeated every day until the violence of the symptoms abate; then pursue a course of treatment pretty similar to that directed for inflammation of the lungs, to which article the reader is referred.

Keep the bowels regular with antiseptic injections;—nothing like a drastic purge must be exhibited in this disease.

CHOREA OR ST. VITUS' DANCE.

This disease is characterized by convulsive motions, which are usually confined to one side, affecting principally the arm or the leg. At first, the lower extremity is most affected. The first symptoms you discover are lameness and weakness in one of the legs. In walking the leg is not lifted in the usual manner, but is dragged along as if the whole limb were affected with a paralytic stroke; and when an attempt is made to move it, the motion is unsteadily performed, being irregularly and ludicrously agitated; and when the limb is at rest, the foot is frequently agitated by involuntary motions. The affection extends to the arms, when similar convulsive

and involuntary motion affects them also, being often moved in a direction contrary to the one intended; and is always moved with irregularity and uncertainty, as if the person intend to perform many odd gestures. The tongue also suffers from the disease so as to render articulation indistinct, and often quite unintelligible; it is frequently thrust out of the mouth involuntarily, giving the person the appearance of an idiot. When the disease continues a long time, it injures the general health of the system, emaciates the body, and impairs the mental faculties.

This distressing complaint is generally supposed to originate from a general weakness, and irritability of the nervous system, which state of the system may be produced by various irritations, such as worms, teething, offensive smells, violent emotions of the mind, as fright, horror, anger, &c. Dr. Thomas says that he has witnessed several cases in which it arose from sympathy, or associating closely with those who labored under the disease. In some instances the complaint is hereditary. The young are more liable to attacks of this disease than the aged; though it sometimes occurs after maturity and grows worse with age. St. Vitus' dance is not attended with very dangerous consequences, unless it be very violent, or pass into epilepsy.

TREATMENT.

As this complaint is usually attended with costiveness and debility, your first care should be to relieve the bowels and keep them regular with tonic injections:—active purges should not be used in this disease, particularly where debility prevails. The next intention to be answered in the treatment of this case, is to remove the irritation and strengthen the general tone of the system. To answer this intention, it will be proper to exhibit an occasional course of medicine to throw off the morbid matter and equalize the circulation; then give repeated doses of the nervine tincture, with an occaeional dose of

the antispasmodic tincture to allay nervous irritation; and three or four doses a day of the tonic tincture, tonic cordial, or the laxative bitter tonic, to increase the general tone of the system. The infusion of the scullcap or mad-weed, made by pouring a quart of boiling water on an ounce of the plant; and when sufficiently drawed, strain and sweeten with sugar, is said to be quite a specific for this complaint. Of this infusion the patient should drink frequently through the day, taking alternate doses of the nervine tincture.

Diet should be generous and nourishing.

GOUT.

Systematic writers divide this disease into regular and irregular. Of their regular gout, there are three species, viz: the atonic, the retrocedent, and the misplaced.

In *regular* gout the inflammation and pain occupy the joints principally of the feet and legs; and after continuing a certain period, gradually disappear, leaving the general health but little impaired.

In *atonic* gout the general health is considerably affected, in consequence of which the system does not possess sufficient energy to produce a proper degree of inflammation in the extremities; the digestive process is imperfectly performed; loss of appetite, flatulence, eructations, spasmodic pains, and nausea ensue, not unfrequently accompanied with dejection of spirits, and other hopochondriacal symptoms.

When the inflammation and pain suddenly cease, after having occupied a joint some time, and are translated to some other part, as the head, lungs, heart, or stomach, it is called the *retrocedent* gout.

Where the gout does not produce any inflammatory affection of any joint at all, but seizes directly on some internal part, it is called *misplaced* gout. This kind of gout produces inflammation in the part affected, giving

rise to the same general symptoms that attend an inflammation of such part from any other cause.

Persons of a full habit, particularly those who live luxuriously, and lead a sedentary, or an inactive life, are most liable to attacks of this disease. Those constantly employed in active or laborious pursuits, and living on plain wholesome diet, are rarely afflicted with gout. Although no age nor sex is entirely exempt from attacks of this torturing malady, yet it is rarely met with before the middle of life, and more frequently among men than women. When this disease is met with in youth, it is ascribed to that predisposition or constitutional bias, which is entailed by the parents.

The most common predisposing causes of this complaint, are, luxurious or intemperate living on a rich, high seasoned diet; excessive use of vinous or fermented liquors; leading an inactive, or sedentary life; intense application to study; long want of rest; grief, anxiety, or great sensuality; sudden change from a full to a spare diet; exposure to cold, wet feet, &c.

Regular gout, in some instances, has come on suddenly without any premonitory symptoms; but it is generally preceded by flatulency in the stomach and bowels; eructations or belching of wind; dejection of the spirits; an unusual sensation of coldness, and numbness in the feet and legs, with a suppression of perspiration in them; great lassitude, and fatigue are experienced after the slightest exercise; the bowels are costive, and the urine pale.

A paroxysm usually comes on in the night with an excruciating pain either in the joint of the great toe, or in the heel, calf of the leg, or perhaps in the whole foot. The pain becoming more violent by degrees, is accompanied with chills, succeeded by heat and other febrile symptoms. Towards the following evening, the pain having attained its height, gradually mitigates, a gentle moisture appears on the surface of the skin, and the patient, being much relieved of his torture, falls asleep; but when he awakes he finds the parts which had been

painful, now much inflamed and swollen. On the succeeding evening, both the pain and fever return, and continue with more or less violence during the night; towards daybreak, they subside and go off: this continues for several days, taking the same course above described. Several such paroxysms constitute what is called a fit of the gout. The duration of the fit depends on the strength of the patient, the season of the year, and the predisposition of the system to the disease. In general, the first fit continues two or three weeks, although there may be some alleviation after the second day; it at length goes off either by perspiration, increased flow of urine, or some other evacuation. The cuticle or scarf-skin peels off the affected parts, leaving a tenderness, and lameness for some time.

At first, a fit of the gout occurs probably but once in two years; afterwards it comes on every year, till at length it becomes very frequent. Each returning fit becomes more severe, both as to the degree of pain as well as the number of parts affected. Generally only one foot is seized at first, but afterwards both feet are affected, one after the other, as the disease advances it affects both feet at once. Sometimes it shifts its seat from the feet to other joints, both of the upper and lower extremities; and in very severe cases there is scarcely any joint of the body that does not in its turn feel its effect. Although the attack may be in more than one joint at once, yet it usually happens that it is only severe in one at a time, passing successively from one to the other, and by this means the sufferings of the patient are frequently prolonged to a considerable length of time.

After frequent attacks the joints lose their strength and flexibility, becoming so stiff as to interfere materially with their accustomed motions. On the joints of the fingers, little hard swelling or nodes arise, and chalky concretions are formed; and frequently both the kidneys and bladder become affected with small stones of a similar nature.

In *atonic* gout if the head be affected, there is usually

great pain, and perhaps giddiness; sometimes apoplectic or paralytic affections, are the consequence. When the lungs are affected, the attendant symptoms are very similar to those of asthma. If the heart be affected, the symptoms are, palpitations, faintings, and an intermittent pulse. And when the stomach is the seat of the disease, the symptoms are, great pain in that organ, with nausea and vomiting; flatulency and eructations; dejection of spirits, languor and want of energy; apprehension of danger; sometimes obstinate costiveness; and at others, there is purging. In addition to these symptoms, cramps in different parts of the trunk, and upper extremities, frequently occur.

In the *retrocedent* gout, when the disease is translated to the heart, stomach, or lungs, the symptoms are pretty much like those accompanying an attack of *atonic* gout in these parts.

In the *misplaced* gout, where the disease directly attacks some internal part, producing inflammation there, the symptoms are mostly similar to those accompanying such an affection in these parts heretofore described. See inflammation of the stomach, lungs, brain, &c.

The gout is sometimes mistaken for the rheumatism, as cases do occur in which there is some difficulty in distinguishing them. An attentive consideration of the life and habits of the patient, the parts affected, the symptoms that precede the attack, and those which occur during the paroxysm, will generally enable you to distinguish them. In gout, the pains generally attack the small joints first, and are less liable to shift than in rheumatism; but when they do, they commonly fix upon the same joints of the other limb, or upon some internal part: the part affected, is more red and swelled than in rheumatism; the dyspeptic symptoms, such as flatulency, eructations &c., which precede an attack of the gout rarely precede an attack of rheumatism. When rheumatism and gout are combined a distinction is neither possible, nor is it necessary for any important practical purpose.

Fits of regular gout, though extremely painful, are seldom attended with any immediate danger; but in the irregular forms of gout, much more danger is to be apprehended, particularly the *retrocedent* form of the disease; for instances have occurred, in which the patient lived but a few minutes after the attack.

The annals of disease furnish some accounts of the immediate cure of the regular gout by the influence of fear or fright, one instance of which we beg leave to subjoin for the amusement of the reader.

The hero of our story was lying on his bed in an upper room, and was suffering the most exquisite, torturing agony from a paroxysm of the gout in the feet, and in a fit of impatience, expressed the silly wish that the devil would come and fly off with his legs. Just at that moment a chimney sweeper, who had been sent by his master, unknown to the gouty patient, to sweep his chimneys, descended in sooty majesty into the sick man's room. He instantly discovered his mistake, and by way of apology for his smutty intrusion, made a low bow, adding "Your servant sir, my master will be here directly;" and immediately he vanished up the chimney. This unexpected visitor, the gouty patient esteemed no other than a messenger from his satanic majesty to inform him of his intended visit. And as this anouncement followed so closely after his expressed wish that the devil would come and take off his legs, he naturally supposed that the object of the announced visit was most certainly to fulfil his wishes; but as the idea run mightily through his mind, and wrought strongly on his imagination, that his satanic majesty might be for carrying off his soul and body too with his legs, he instantly bounded from his bed, and run down stairs to seek the aid of company to prevent the dreaded transportation to the kingdom of darkness. To his great astonishment, and greater delight, he found himself perfectly cured of his gout.

TREATMENT.

Dr. Thomas of England, who has often successfully treated this complaint, says, that exciting and keeping up a perspiration will alleviate the pain, and shorten the duration of the paroxysm. The course of medicine has been found the most efficient means of easing the pain, and shortening the fit. In connection with this apply flannel cloths to the painful part wrung out of a tea of rattle root, may weed, or camomile about blood or milk warm; for if made either hot or cold it does not answer the intention. Bathing the part occasionally with bathing drops about the same temperature, during the application of the above fomentation will promote its good effect. Repeat the course of medicine at least once a day until the symptoms abate, omitting the emetic after the first course, unless the state of the stomach indicate its necessity. Between the courses of medicine, drink two or three doses daily, of the rheumatic tincture, or rheumatic decoction, page, 378, or drink the infusion or tea of rattle root. Whenever the paroxysm of pain returns employ the fomentation, and bathing drops, above directed. Keep the bowels open by injections.

As a preventative of the return of the fit, the patient should use the diaphoretic powders, and the bitter tonic powders, and use a light, nourishing diet, taking regular exercise. High seasoned victuals, and spirituous and vinous liquors should be scrupulously avoided. Every species of food that irritates the stomach, must be abstained from; and pains must be taken to keep the mind tranquil as possible.

Should the inflammation be translated to some internal part, as to the stomach, lungs, &c., treat the internal inflammation as directed under the proper head; and bathe the part from which it was translated with the strongest decoction of pepper and vinegar, about milk warm, and apply a poultice of red pepper pods, by steeping them in warm water until soft, then open them, and apply the inside to the skin; this will irritate the part,

and tend to bring the inflammation back to the external part. In all the irregular forms of gout where the inflammation is seated on some internal part, your great reliance must be placed on a vigorous treatment of the case, as directed for inflammation in that part, from any other cause.

RHEUMATISM.

This very painful disease which affects the joints and muscles in different parts of the body, is distinguished into acute and chronic: when both fever and inflammation accompany the pain, it is called acute rheumatism, and when little or no fever and inflammation attend the pain, it is then called chronic rheumatism.

Whatever obstructs perspiration, or the passage of the fluids through the vessels of the part, as exposure to cold or wet, wearing damp clothes, sleeping in damp beds, or in low, damp rooms not well ventilated, or cooling too suddenly, when in a high state of perspiration, may be considered the chief and most common causes of rheumatism.

This complaint may occur at any season of the year, when there are frequent changes of weather from heat to cold or from wet to dry. Persons of all ages are liable to its attacks; but adults, and those advanced in life, and particularly those whose employments subject them to sudden transitions from heat to cold.

There is a species of rheumatic affection, which in reference to its cause, is called *rheumatic mercurialis*, meaning rheumatism produced by the use of mercury as a medicine.

An attack of acute rheumatism usually commences with chills, succeeded by heat, thirst, restlessness, anxiety, a hard, full, quick pulse, and other symptoms of inflammatory fever. Next, an acute pain is felt by the patient, in one or more of the large joints of the body, followed by a tension and swelling of the affected parts.

Like the gout, the pain is apt to be transitory, shifting from one joint to another, leaving the part previously occupied red, swollen, and very tender. The tongue is white, the bowels generally costive, and the urine high colored.

The chronic form of this disease, may either be a consequence of the termination of the acute, or it may arise independent of it. When acute rheumatism terminates in the chronic, the parts, which were affected with inflammation, are left rigid, weak, and in some instances puffed; and the pain being no longer moveable, is confined to the same parts: some instances, however, occur in which it shifts from one joint to another, but it is unaccompanied with inflammation or fever.

When a rheumatic affection attacks the hip joint, it is usually called sciatica; and when the small of the back is attacked, it is often termed lumbago. These distinctions, however, afford no practical advantage; and will therefore, receive no further notice.

TREATMENT.

As might be expected, a complaint so prevalent, so painful, and so difficult of cure as this, would invite to the trial of many remedies, and the adoption of various and even discordant modes of treatment. Many articles also have been ushered into public notice as specifics; but no one that we know of, has been fortunate enough to sustain the character of an unfailing specific. It is true, that remedies have been discovered which evince great efficacy in curing this disease, even in some of its most aggravated and hopeless forms; yet these same remedies in other cases have failed to effect a cure, even in cases apparently of a less aggravated character.

In acute rheumatism, means must be employed to reduce the inflammation, and clear out the obstruction that exists in the vessels of the affected part, and when this is done, the pain will disappear. This we take to be the true indication to be answered, in the treatment of

acute rheumatism; for it is acknowledged, that in all cases of this complaint, there is more or less insensibility in the affected part, and this insensibility must manifestly be the result of obstruction in the part. In many cases of rheumatic affection, so great is the insensibility in the affected part, that the strongest stimulant applications to it, are scarcely able to make any impression upon it.

To answer the above named indications, you may commence your treatment by evacuating the bowels with laxative injections. While this is doing prepare for carrying your patient through a full course of medicine, making the patient drink freely of the diaphoretic powders, adding a half tea-spoonful of cayenne to each dose. The affected part should be frequently bathed with bathing drops, or with a strong decoction of pepper and vinegar. Apply flannel cloths wrung out of a decoction of rattle root, pleurisy root, young pine roots, or may weed, repeatedly.

For most mild attacks, the above treatment, if adopted immediately, will be sufficient to effect an immediate cure; but if the case be of an obstinate character, and of long standing, it will require a continued application of a similar treatment, or perhaps, it may be necessary to vary it to answer the peculiarity of the case; for almost every case presents something in it peculiar to itself, which no doubt depends upon the idiosyncrasy of the patient, his habits, business, condition in life, or the peculiar cause from which the disease originated.

Obstinate cases, in addition to the above treatment, require repeated courses of medicine; the emetic may be omitted after the first course, or at least, need only be used when the state of the stomach, or general health indicate its propriety. If the affected part be on any of the extremities, the vapor bath may be frequently applied to that part alone. A medicated vapor bath we are told on respectable authority is much more efficient in this disease than the ordinary one. A strong decoction of rattle root, used instead of water for the vapor

bath, has been highly recommended by a gentleman that has, as he states, used it successfully in two cases, after other remedies had failed. In connection with the course of medicine, and vapor bath above recommended, we will point out several remedies to be used internally, and applied externally.

Besides the diaphoretic teas necessarily connected with use the vapor bath, the patient should drink daily three doses of the tincture of poke berries, and tea of rattle root. Fill a quart bottle with the ripe poke berries, and add as much spirits as the bottle will hold;—after it has stood long enough to extract the strength of the berries it is ready for use. Of this tincture, take from one to two table-spoonsful into a half tea-cupful of the tea of rattle root. In the mean time, you should keep the drug poultice, page, 369, applied to the affected part, keeping it moist with bathing drops, or with spirits. The rheumatic tincture, or rheumatic decoction, page, 378, may be used internally instead of the tincture of poke berries, and tea of rattle root. In some cases bathing the part with oil of sassafras or oil of cedar, has been found very useful. Where the joints are stiff, or contracted, use some of the ointments recommended, pages, 388, 389, and 390.

Strength may be restored to a weak joint, after the pain and soreness have left it, by bathing it daily with some stimulating wash and pouring cold water upon it. Immediately after pouring cold water upon the part, it should be wiped dry, and wrapped in flannel.

Keep the patient's bowels regular during the whole treatment, by the use of injections or mild cathartics; and keep up his strength by a light, nourishing diet, using occasionally the tonic tincture, or wine bitters, if the patient's condition indicate the propriety of using tonics.

IMMODERATE SWEATING.

Immoderate sweating is commonly an attendant upon

some other disease; yet in a few instances, it has occurred as an original disease.

This complaint is caused by great weakness and debility, particularly in the cutaneous vessels. Where this complaint prevails it increases the debility. In the last stages of consumption, and in some stages of intermittent fevers, this disease is often met with as an attendant symptom.

TREATMENT.

In the colliquative sweats, which attend the last stages of consumption, no method of cure can be employed with a prospect of success.

The shower bath, applied daily, must be your principal reliance for a cure of this complaint. The patient should drink a good dose of the diaphoretic tea just before he takes the bath, and one after he has wiped dry and gone to bed; this will obviate the danger of taking cold from the bath. He should also use the bitter and astringent tonic, two or three times a day. Adding some astringent tonic article to the water will increase the good effect of the bath.

INSANITY, OR MADNESS.

This complaint has been designated by various other names, such as mania, derangement, craziness, &c. It is characterized by a derangement of the mental operations, generally unattended with fever. This disorder has given rise to many fine spun theories, and ingenious speculations, offered to the world in explanation of that which the writers themselves did not understand; i. e. the true definition, and pathology of the disease.

Most writers on this subject divide it into two species, the melancholic, and the furious. Each of these are again subdivided by Dr. Good, into several varieties; but as these hair-splitting distinctions contain but little

interest, and less information of practical importance, we forbear to inflict them upon our readers.

The most distinguishable symptoms that precede, and accompany melancholic madness, are, dejection of spirits, fretfulness, fickleness, timidity, fondness for solitude, restless nights, paleness of visage, scanty urine, costiveness, unwillingness to move, or if the patient does move, he exhibits the marks and gestures of one in a hurry; he also manifests an unwillingness to talk, or if he does talk, his remarks are quite incoherent.

The symptoms attending furious madness, are, wildness of the countenance, redness of the face, glistening of the eyes, pains in the head, noise in the ears, grinding of the teeth, violent exertions of strength, loud shouting and roaring, absurd, incoherent, and often obscene discourse; a dislike to those places and scenes, which formerly afforded pleasure; an unaccountable abhorrence of nearest relatives, and malice towards former friends; and withal there is an increased capacity to bear cold, hunger, and want of sleep.

The above, are some of the most prominent, and distinguishable symptoms attending insanity. Any description of the symptoms of this disorder, however must, necessarily be imperfect, on account of the great variety of symptoms and modifications, which attend this complaint through every stage of it. This diversity of character in the symptoms, depends upon the dissimilarity of causes which produce the disease; the different propensities, and habits of life in the different individuals, must, undoubtedly, create a great diversity of character in the symptoms in different patients; and further they must continually be modified by the circumstances which immediately surround them, or objects that incidentally attract their attention.

Insanity may be produced by violent emotions of the mind, as excessive grief, long indulged, fear, terror, disappointed love, deep misfortune; intense thought, abstruse, perplexing studies, intemperate use of vinous and spirituous liquors; by narcotic or stupefactive poi-

sons; by acute fevers or some other diseases affecting the brain, and by injuries on the head. In some cases insanity appears to proceed from a hereditary predisposition or constitutional bias; for it is an indisputable fact, that the offspring of insane persons, are more liable to be affected with insanity than the children of sane persons.

A very common form of insanity is that which is termed intermittent, in which the paroxysms of insanity are divided by intervals of rationality, and quietness.

TREATMENT.

The method of treatment must depend in a great degree upon the causes which produce the complaint, and the circumstances which surround the patient, when of such a nature as would be likely to vary the character of the symptoms. The treatment must necessarily be both mental and medicinal. We are apprised that some respectable physicians say, that no medicinal remedies can avail any thing, and that the treatment must be wholly mental. But that maniacs do require medicinal aid, at least in the first stages of the complaint, we think is clearly indicated by the fact that numerous dissections, have found that insanity was connected with a morbid state of the brain. The writer would beg leave to remark that he can not conceive how any species of insanity can possibly occur without some morbid or deranged condition first occurring in the material part; for the thinking intellectual power being immaterial, must be imperishable, and if imperishable can not be subject to injuries and functional derangement; for whatever is subject to injuries and functional derangement, may be disorganized, and if it may be disorganized, it is dissoluble, and consequently perishable. Every species of insanity, therefore, must depend upon causes that derange or disorganize those material parts which are intimately connected with mental operations, or through the medium of which, the soul carries on her intercourse with material objects while connected with the body.

In the treatment of insanity, the object should be first to ascertain if possible the exciting cause, and then direct your efforts to remove that cause.

So far as medicinal aid is required, we would recommend, if the patient's general health be impaired, to employ the course of medicine with some suitable tonic for the restoration of the general health. The tea or tincture of the nerve powders may be used with great advantage in giving tone to the nervous system, when used in connection with the above recommended treatment. In furious fits the antispasmodic tincture may be used with advantage. Other remedies may in some instances be necessary, but their employment must be left to the judgment and skill of the practitioner.

The mental treatment will require considerable skill and judgment founded on an acquaintance with human nature. An important object is to obtain the confidence and respect of the patient. This will enable you to secure his obedience, which will render the directing of his mind to proper subjects, and the administration of proper remedies far less difficult.

Suitable exercise is essential; but in choosing the proper kind of exercise, strict regard should be paid to the choice of that kind which is least likely to produce any allusion to the cause of the disease, and such as is most agreeable to the patient. Where the complaint has originated from troubles and misfortunes of any kind, endeavor to make the unfortunate patient forget the cause of his woe by healing, so far as kindness can, the wounded spirit, and by exciting different trains of thought.

INTOXICATION.

Persons addicted to drinking spirituous liquors sometimes drink so much as to endanger the life by the immediate suspension of the motion of the living machine from the great relaxating effect the spirit has upon the system.

In all such cases the consequence will be deleterious, if not fatal, without immediate medicinal aid.

It is generally well known that he who addicts himself to the intemperate use of ardent spirits, gradually undermines his constitution, and lays the foundation of some of the most stubborn and incurable diseases that afflict humanity. To prevent this deleterious consequence, the only alternative is to abandon the ruinous practice: —nothing else will avail any thing.

TREATMENT.

When a person has drunk enough to make him *dead* drunk, and appears to be near dying, immediately place him in a situation most favorable to the free circulation of the blood, loosening his clothes if they appear to bind any place, particularly about the neck. A stimulating injection must be administered without delay;—the injection may be made of warm water or milk to which a half a tea-spoonful of cayenne should be added. If you judge that the patient needs an emetic, one may be administered by injection. Keep the patient warm, and repeat the stimulating injection if necessary to keep up the strength of the patient until the danger is past.

The Domestic Encyclopedia recommends the administering of the urine of a healthy person internally, as a speedy and effectual remedy for the intoxicating effect of the liquor. The remedy certainly is not very inviting, but perhaps the patient would rather take it than die.

HYDROPHOBIA, OR BITE OF A MAD DOG.

Canine madness or hydrophobia is a disease that arises from the bite of a rabid animal. The term hyrophobia signifies a fear or dread of water, which is one of the distinguishing characteristic symptoms of this disease. Hyrophobia appears to arise spontaneously in dogs, cats,

wolves, foxes, &c.; but from what cause is not satisfactorily known. Some late experiments in France, however, has led some distinguished physicians to suppose that this disease originates in those animals because they do not sweat. It has never been known, say these theorists, to originate in any animal that sweats, without the communication of the hydrophobic poison by a bite or otherwise.

The symptoms which generally characterize the commencement of this disease in man, are, slight pains in the part which had been bitten, although long after the wound is healed; the scar becomes red or livid, and often opens afresh oozing out a little colored matter. The patient now becomes affected with great languor, deep melancholy, disturbed sleep, frightful dreams, sudden startings, sighing, anxiety with love of solitude. Pains now begin to shoot from the wounded or bitten part quite up to the throat accompanied with a straitness and sensation of choking, and a dread or horror at the sight of water or other liquids, together with tremors and a loss of appetite. In general the patient can swallow any solid food, but when any fluid comes in contact with his lips, he starts back with the greatest impatience and agony, as if seized with a convulsive spasm. He experiences extreme pain at the bottom of the chest, and mournfully points to that part as the principal seat of suffering. When the disease has arrived to this stage, a considerable fever attends; the tongue becomes dry and rough, often hanging out of the mouth; the voice is hoarse, and the thirst very great, though the patient cannot venture to drink. He spits at the by-standers and apparently has a desire to bite those he can come at;—but still he has the sense to beg that they would keep from him for fear of an accident of that kind; he rages and foams at the mouth. After these symptoms continue three or four days, the pulse sinks, cold clammy sweats come on, breathing fails, convulsions ensue and thus the tragic scene ends.

We deem it proper at this place, to give the symptoms

of hydrophobia in dogs, as every one ought to be able to judge whether a dog is affected with this disease, as deleterious consequences may ensue from a want of this knowledge.

When a dog becomes affected with this complaint, he first appears duller than usual, seeking solitary places, as if endeavoring to hide himself; he seldom barks, but makes a murmuring noise, and refuses both food and drink. He still knows and respects his master, but when strangers come in sight he often flies at them; his head and tail hang down, and he walks as if over-powered by sleep. A bite at this period, although dangerous, is not so apt to bring on hydrophobia as one at a later period of the disease. As the complaint progresses, the symptoms become more aggravated; the breathing becomes quick and heavy; the tongue hangs out, and the mouth foams. Sometimes his movements are very slow, and at others, he runs, starting suddenly, but his movement is not always straight forward. At length he forgets his master; his eyes become dull, watery, and red; he often falls down through weakness, and then rises when a fit comes on, attempting to fly at other animals, especially dogs, and becomes quite furious. The living power becomes exhausted, and the poor, miserable creature dies between the third and sixth day after the attack.

The length of time intervening between the bite of the rabid animal, and the commencement of the hydrophobic symptoms varies considerably in different animals. In dogs it is generally from five to fifteen days; and in man it varies from one to six weeks, and sometimes even as many months. A few instances are recorded in which several years elapsed between the bite, and the attack of the disease.

TREATMENT.

Dr. Good, an eminent physician of the old school, in remarking upon the treatment of this dreadful malady

says, "Our curative practice is unfortunately all afloat, and we have neither helm to steer by, nor compass to direct our course. There is indeed, no disease for which so many remedies have been devised, and none in which the mortifying character of vanity of vanities has been so strikingly written upon all of them." So much for what the ingenious Dr. Good says on the subject. Experience has not only convinced Dr. Good, but many others, that all the remedies, and various modes of treatment recommended by different authors of the faculty, whether stimulating or depleting, relaxing or exciting, burning or cutting, all fail in their hands to cure a confirmed case of hydrophobia:—a mere tissue of error and unprofitable experiment. And as the faculty have never been able to cure a single case of confirmed hydrophobia, with their own treatment, and as they claim the *exclusive* privilege of carrying the keys of medical knowledge, thinking that "they are the men and that wisdom will die with them," they very naturally draw the conclusion, that no valuable remedy for any of the maladies of suffering humanity, could ever be discovered out of the halls of medical science. The case being thus prejudged, they scoff at the idea of curing the hydrophobia, and to keep their scoffing in countenance, they will allow no case to be *genuine* hydrophobia, however clearly the distinguishing symptoms of this fatal malady may develop themselves, unless it prove itself to be such by terminating in *death*.

In 1831 a case was brought to a couple of the faculty in Cincinnati, which after due examination of the symptoms they pronounced to be a genuine case of hydrophobia and frankly acknowledging their inability to do anything for the patient, dismissed him. A botanic practitioner took the case in hand, and although he found it a remarkably obstinate one, yet he finally succeeded in effecting a thorough cure. What now must the gentlemen of the faculty do to keep the people in the belief that hydrophobia is incurable? Why they turn about and proclaim to the world that it must be a mistake, the

case could not be genuine hydrophobia, unless it terminate in *death!!* The faculty certainly require a very severe test of the botanic doctors to prove their ability to cure hydrophobia; viz: the case must first prove itself to be genuine by terminating in death!—this may do the advocates of poison; for they can treat the case as successfully after the patient is dead, as they generally do while living; but a botanic doctor finds he can do much the best while the patient is alive! Well, the public have one consolation, if the faculty will not allow the botanic doctors the honor of curing hydrophobia, until the case proves itself to be *genuine* by terminating in *death*, a *genuine* case of hydrophobia will rarely ever occur if the treatment here subjoined, be perseveringly pursued, and that will answer as well as if the *learned faculty* would condescend to allow them the credit of curing the disease.

Dr. Thomson's maxim was, that an ounce of preventative was better than a pound of cure; and certainly there can be no case in which the importance of realizing this truth should be more attentively regarded than in this. Acting on this principle, you should commence the treatment of the case immediately on receiving the bite of any animal supposed to be affected with canine madness. The wound should be well washed with the saturated tincture of lobelia, and if the teeth of the animal have penetrated deeply into the flesh, employ a small syringe to force the tincture into the wound in order to wash it out to the very bottom. This washing must be repeated several times a day until the place heal up entirely. In the mean time the patient should be taken through a full course of medicine every other day, and take the vapor bath alone on the intervening days, in connection with which the patient should take three times a day as much of the tincture of lobelia as his stomach can bear so as not to puke him. It would be proper to continue this course of treatment several days, perhaps eight or ten;—the longer it is continued the less danger there is of an attack the hydrophobia.

Where symptoms of hydrophobia have actually made their appearance, you must then employ full and repeated doses of the antispasmodic tincture and in connection with it the nervine tincture, on these place your principal reliance for relieving the spasms. Courses of medicine must be used from once to twice a day. This course must be vigorously persevered in, being particular to administer enough of the antispasmodic tincture to break the force of the spasms:—free vomiting and profuse perspiration, are important. In general when you first commence the courses of medicine the patient will vomit up a great quantity of remarkably tough mucous or phlegm, being so tough that it will rope two feet long without breaking. This must come off of the stomach and no emetic ever yet tried can master this tough phlegm like the lobelia. Some of our friends of *calomel* and *tartar emetic* will probably try to persuade you, as they have done others, that puking up this phlegm, is puking the liver; but do not be alarmed at their assertions, for if your liver has got into your stomach, it is in the wrong place, and as there is a bad chance to get it put back to the right place, you may as well puke it up and be done with it—a liver that runs about and gets into the stomach is not worth having!

Some few years ago, we read an account of a doctor in France who had been so unfortunate as to catch the hydrophobic infection from wiping his hands on a towel that had been used to wipe the froth from the mouth of a person that was in the last stages of this disease. On his hand there happened to be a sore which readily imbibed the hydrophobic poison from the froth on the towel. In the course of a few days he felt the approach of the symptoms of this fatal malady. A few more days exhibited the appalling fact that he really had the hydrophobia. Regarding the disease as perfectly incurable, and thinking that death was unavoidable, he determined to anticipate the stroke of death by this dreadful disease, and slip off this mortal coil in some easier way. Accordingly he determined to raise a high steam, in a house

built for the purpose of receiving the vapor bath in, and then get in head and all, and smother himself to death in this way. The doctor was soon thrown into a profuse perspiration, and finding so much relief in the symptoms, it occurred to him that the vapor bath might prove the means of curing him of this malady hitherto fatal to all who were affected with it; and accordingly, when he judged that he had staid in the bath long enough he came out. He repeated the vapor bath daily until a perfect cure was effected. The same physician cured seventy-nine out of eighty patients by the same treatment, before he published his discovery. His account stated that the patient he had lost, was not killed by the disease, but by his indiscretion in the treatment, that the patient being a child, he did not consider that it could not bear the same temperature in the vapor bath that a grown person could, and that the child died through the excessive temperature of the bath.

SMALL POX.

Small pox is commonly divided into two species distinguished as the *distinct* and *confluent*. When the pustules are separate and distinct, it is known by the former appellation; and when they run into each other or coalesce, it is known by the latter.

This complaint in large cities, and in densely populated countries, has proved a most fatal scourge, and formed one of the great out-lets of human life. As no account of this disease is found among the writings of the ancient Greek and Roman physicians, it is supposed that the disease was unknown to them, and that it is a disease of later origin. The earliest account of it that is met with is in the works of Arabian physicians; and from that country it passed into Europe, spreading terror and dealing death wherever it went, unrestrained by any medical means employed to check it.

Small pox is contagious; though like the measles,

and some other eruptive diseases, it rarely, if ever attacks the same person but once. Some individuals appear to be unsusceptible to the infection of this disease, although exposed to it often through life.

An attack of *distinct* small pox is ushered in with restless, uneasy sensations, and great dislike to motion, accompanied with chills and heat, succeeded by vomiting, soreness of the throat, pain in the head, and small of the back, with great thirst, stupor, a quick pulse, and in very young children convulsions resembling epileptic fits frequently occur. About the third or fourth day, the eruption appears on the face, neck, and breast, in small, red spots, which feel hard in the skin when pressed with the finger; in the course of two or three days more the whole body becomes spotted, though the eruption on the face is generally greater than on any other part. Between the fifth and seventh day, the pustules begin to swell, grow hot and painful, assuming a florid red color around the basis. About this period the spittle becomes viscid, and is increased in quantity; the throat swells, and is attended with difficulty of swallowing and hoarseness.

The pustules, are generally completely formed, and in their full state by the eighth or ninth day; and at this period, they contain a whitish fluid matter. The face is now swelled, which extending to the eye-lids, often enlarges them so as to close the eyes. By the eleventh day, the matter contained in the pustules is changed from a white to an opake yellow, and a dark speck appears on the top of each. About this time, the swelling of the face subsides, and a swelling of the hands and feet ensue; and what is called the secondary fever, now makes its appearance. After this, the pustules become rough, break, and discharge their contents, which drying on the surface, form small scales or scabs over each pustule. When these fall off, which takes place in a few days, they leave the part of a dark brown color; and if the pustules were large, or long in drying up, deep pits or marks will be left in the skin.

The *confluent* small pox differs from the *distinct* both in its symptoms and progress. In the former, the eruptive fever often shows itself at an early period, and exhibits a tendency to the typhoid form, attended with considerable stupor, and sometimes delirium. Irregularity attends the eruption, both in its appearance, and in the succession of its stages. An efflorescence usually appears on the face about the second day, from which the pustules emerge in the form of small, red pimples; these, in a short time run into each other, and form clusters, and are filled with a brown, acrid fluid, and the intermediate spaces between the clusters appear pale and flaccid. The swelling appears earlier, and is generally greater than in the other form of this disease; and the fever does not cease upon the appearance of the eruption. In some cases the most aggravated symptoms of malignant typhous ensue; the eruptions assume a livid appearance, with purple spots between them; blood is discharged from the different out-lets of the body, and the struggling powers of life fall in the conflict before the conquering foe, between the eighth and seventeenth day, unless medicinal aid is seasonably brought to bear, and its active, efficient powers properly directed against the advance of the disease.

TREATMENT.

On the very first approach of the symptoms, it will be proper to commence active operation, not only for the sake of rendering the success of the treatment more certain, but also to prevent, as much as possible, the disfiguring of the patient.

Commence your treatment by relieving the bowels with injections, and then carry the patient through a full course of medicine, and in the course, you may give a gentle cathartic. In about eight or ten hours after this, a laxative injection should be given. This course must be repeated every twenty-four hours until the disease is conquered. Between the courses of medicine

the perspiration should be kept up by the use of diaphoretics; this will obviate any danger of taking cold, and keep the eruption out. He should from the first, take daily two or three doses of the infusion of rattle root. The patient may use some good tonic after the force of the disease is broken, to restore tone and vigor to the system. It is however, often necessary to administer tonics during the treatment to sustain the strength of the patient, and keep up the tone of the digestive organs. You must not starve your patient, but give him enough of light nourishing food to sustain the living power, for it is ascertained by experience that the danger of a fatal termination of the disease, is always proportioned to the diminished energy of the system. If the throat become sore treat it as directed under the proper head.

If the fever is very high, before the vapor bath is applied, make the patient drink freely of the sudorific powders to raise the internal heat, and let down the external heat by rubbing the patient all over with a flannel cloth wet with antiseptic tincture; this may be done every time the fever rises. If the antiseptic tincture is not at hand, pepper and vinegar will answer. A portion of the antispasmodic tincture should be taken in each emetic; and indeed, some practitioners use it alone for the emetic in bad cases. Keep the bowels regulated by injections, and be sure you avoid cooling cathartics.

This course, perseveringly employed not only is more speedy and certain to effect a cure in this disease than any plan of treatment ever tried by the faculty; but what is further worthy of consideration, patients cured in this way are but little if any, marked by the disease.

COW POX OR VACCINATION.

About fifty years ago vaccination as a preventative of small pox began to attract considerable attention in the county of Dorset in England. It had been long ob-

served that cows were subject to an eruption on their tits and udders, which was occasionally communicated to the hands of those who milked them, giving rise to a few ulcerations, accompanied with slight fever. In the course of time it was observed that those who had gone through this vaccine disease, were not afterward subject to the small pox either naturally, or by inoculation. This discovery, though not made in the temple of medical science, nor in the walks of literature, was hailed as very valuable; because the discovery was not published to the world by those who made it, but Dr. Jenner, one of the faculty, was permitted to have that honor:—an honor, which has carried his name into all countries, and enroled it amongst those who have done something to perpetuate their memory; for had it not been for this circumstance, the otherwise humble name of Dr. Jenner would never have reached the American shores, and the present age would scarcely have known that such a man ever lived.

After it became known that having the cow pox exempted the individual from any danger of an attack of the small pox, experiments were made by inoculating with matter from the human subject, instead of the cow; and it was discovered that this not only answered the desired purpose, but produced a milder disease.

The vaccine matter may be communicated to an individual by making a small scratch with a pin or point of a lancet, just so as to start the blood, and then putting a small quantity of the matter in it: the proper place is on the arm above the elbow.

The matter with which we inoculate should be taken before the ninth day; for after that it is too inactive to be depended upon. If the matter be good, it is transparent, but if it has become opaque, it will not answer, and should not be used. If there be any eruptive disease on the skin, it will prevent the good effect of the inoculation.

Generally on the third day, a small inflamed spot appears, and produces a small tumor where the matter was inserted. About the eighth day the pustule is complete-

ly formed, and a slight pain is felt in the arm pit, attended with slight fever, and increase of pulse. These symptoms, in a day or two disappear spontaneously; there being no medicinal aid required.

MERCURIAL DISEASE.

Mercury in some form or other, is administered by hundreds of the practitioners of the mineral school, as if it were a specific for most diseases; and particularly in all cases, where they do not know what to give, mercurial preparations are the alpha and omega. To all this, there could be no manner of objection, if it were a salutary medicine, and was not attended with such deleterious, and fatal consequences. In describing the pernicious effects of mercurial preparations, we will substitute for our remarks, quotations from the writings of gentlemen of the faculty themselves, who have used these preparations, and witnessed the result, and certainly their testimony on the subject is worthy of credit; for as they themselves have recommended the use of it in some cases, because their *materia medica*, abounding in poisonous articles, furnished them no substitute, that was less pernicious; and consequently, no motive can be ascribed to them for misrepresenting their effects, unless it would be to make the case out better than it deserves.

"Among the numerous poisons that have been used for the cure or alleviation of disease, there are few which possess more active, and of course more dangerous powers, than mercury." Again the same author says, "When the effects of mercury upon the human body are accurately investigated, and duly considered, it cannot fail to appear, that infinite injury must accrue from its use in many cases." Says another author, "Even the simplest, and mildest forms of that mineral exert a most extensive influence over the human frame, and are so deleterious, that even in the smallest doses, sometimes

extensive injuries ensue." "Mercurial preparations, are, probably, more extensively used than almost any other article of *materia medica*; and hence mankind have suffered more from its destructive powers than any or even all other poisonous drugs that have disgraced the science of medicine." "Mercury has left the fearful monuments of its destructive character, in every city, town, village and hamlet in the United States; and in fact, in every civilized country, where fashion and folly have been allowed to triumph over the dictates of common sense." "Mercury proves hurtful to the stomach and intestines, when given in any form, or joined to the best correctors." It "often produces pains like those of rheumatism, and nodes of a scrofulous nature." "Another common consequence of the use of small doses of mercury, is an excessive bowel complaint. In many individuals a permanent irritability of the stomach, and intestinal canal has followed." "Among other ill effects of mercury, it tends to produce tremors and paralysis, and not unfrequently, incurable, *mania*. I have myself," continues the same author, "frequently seen from this cause a kind of approximation to these maladies, that embittered life to such a degree, with a shocking depression of spirits, and other nervous agitations with which it was accompanied, that it is highly probable that many of the suicides which disgrace our country, have been occasioned by the intolerable feelings that result from such a state of the nervous system." "To the truth of these remarks every unprejudiced physician, who has been in extensive practice, must bear testimony."

"Delicate individuals, especially females, often experience after a course of mercury, various modifications of disordered feelings, communicating the idea of imaginary diseases, which unfit them for the duties or life, and render existence a burden. Among the anomalous complaints arising from this cause, may be enumerated, impaired or capricious appetite for food, with all the ordinary symptoms of indigestion, particularly retchings in the morning, and flatulency; disturbed sleep, with

frightful dreams; impaired vision; frequent pains in different parts of the body; occasionally such sudden failure of strength, as if just dying, and at other times violent palpitations of the heart, accompanied with difficulty of breathing."

"So extensively, indeed, have mercurial medicines spread their ravages amongst mankind, that it has become an important part of the physician's study, to learn to designate and remove the maladies which are caused by them." "The suffering, and misery, and waste of human life, that have been produced by the use of such medicine, loudly calls for those acquainted with it, to remain no longer silent spectators of its mighty ravages, sweeping its thousands annually from the stage of usefulness, and the theatre of life."

These are only a few of many quotations, we could introduce from the writings of experienced physicians, showing the effects of mercurial preparations. In addition to these affections, we would remark that the general and characteristic symptoms of what is termed the mercurial disease, are, great depression of strength; a sense of anxiety about the p̄æcordia; irregular action about the heart; frequent sighing; trembling, either partial or universal; a small, quick, and sometimes intermitting pulse; occasional vomiting; a pale contracted countenance; and a sense of coldness.

In conclusion, we would remark that a great majority of the cases of liver complaint and dyspepsy, which are so common of late years, may be traced to the use of mercurial preparations; and it is no uncommon thing these days, when a chronic complaint is met with, to hear the patient say, "I was salivated, and have had bad health ever since."

TREATMENT.

Although the most eminent physicians of the old school have witnessed and lamented the effects of mercury, and still persisted in administering it; yet they have frankly acknowledged themselves unable to des-

troy and remove its effects from the system. And some of them have said, that if could not be done, unless some means could be employed that would promote its evacuation through the proper emunctories or natural outlets, by which other useless and injurious matter is removed from the body.

Fortunately for the world, and especially for the victims of calomel and other mercurial preparations, the botanic physicians have found these very means.

When you are satisfied that your patient is laboring under the effects of calomel or any of the preparations of mercury, you may commence your treatment by first opening the bowels with an injection, and then administer a full course of medicine, making the vapor bath hot as the patient can bear it. The course of medicine must be repeated until a cure is effected. In the courses of medicine the emetic may be omitted every other time, but the patient must drink freely of the sudorific powders, made strong with cayenne. Between the courses the patient must drink the diaphoretic powders, and avoid any exposure to wet or to sudden changes of temperature. He should take gentle exercise, eat a good nourishing diet, and take the bitter tonic twice a day. If there be nervous agitation or trembling two or three doses of the nervine tincture or powders should be taken daily.

You will soon be able to tell whether the patient is laboring under the effects of mercury, after you commence this process, for if mercury is lurking in the system it will be roused up, and the same taste will be perceived in the mouth that was, when it was first taken, and in some instances where a great quantity had been taken, even symptoms of salivation will appear; but they will not continue long. In such cases the face often swells. When this occurs you must either stove the head as directed page, 222, or take a long pipe in the mouth to inhale the fresh, air and cover the head with the body, when the vapor bath is applied, letting the pipe pass through an opening in the blanket; this will remove the swelling in one or two applications.

VENEREAL DISEASE.

At what time, and place, this disease had its origin, is now unknown to the medical world, nor would a knowledge of this circumstance afford any aid in prescribing for the complaint; but about the year 1493, it first attracted attention in Europe, from which it quickly spread to every town, village and hamlet in their respective districts. The prevalence, of this disgraceful, and filthy disease, adds another proof to the truth of the maxims, "he that would be happy, must be virtuous; and he that would be healthy, must be temperate."

The most usual means, by which this disease is contracted, is by illicit intercourse between the sexes; and hence disgrace is attached to it, and on this account many have been induced to conceal their situation, until, by endeavoring to hide their shame they have ruined their constitutions. Yet it sometimes happens, that this contagious complaint, is caught innocently; but the difficulty of proving innocence, almost always leaves a blight upon the character of the sufferer.

The venereal disease shows itself under different forms, according as it happens to be a mere local affection, or one that affects the general constitution. When there is a discharge of matter from the organs of generation the disease passes under the appellation of gonorrhœa or clap; and when ulcers beset the parts, they are termed chancres. When the general constitution is affected, it may be known by the following symptoms; the skin is interspersed with copper-colored spots, the tonsils, uvula, and palate become ulcerated; the eyes are affected with obstinate inflammation; nocturnal pains are experienced; the body is emaciated; the strength fails; and a small fever of the hectic kind ensues. This more fatal form of the disease, is called confirmed pox or lues; it generally ensues from the other form, when suffered to run on without being properly treated. Between these two forms of the disease, however, there often arises a kind of intermediate affection, which is

owing to the absorption of the infectious matter, affecting the glands in one or both groins, they become inflamed, swelled, and indurated: this affection is called buboes.

These several affections, or forms of the disease, it is now pretty generally believed, may be produced from the same virus or poison; and the variety of symptoms may be produced by circumstances, such as constitution, length of time the disease has run on, &c. We deem it unnecessary to occupy time and space to give a minute description of all the distinguishing symptoms of each of these forms of the disease, in all their different stages, as it would be of no great practical importance.

TREATMENT.

You will find but little difficulty in curing this disease, if you commence in time; but when it is suffered to run on until the general health of the system is affected, and consequently the constitution, impaired, much more difficulty will be met with in subduing, and thoroughly removing it from the system. As soon therefore, as an individual, discovers that this shameful disease has been contracted, which may be known by the appearance of the chancres, or ulcers about the organs of generation, the affected part should be well washed first with soap suds, and then with the tincture of lobelia. It is true, this application will not feel the most comfortable; but those who have been reckless enough to rush into this difficulty, must prepare their minds to bear whatever will be necessary to obtain relief. This washing should be punctually attend to at least two or three times a day. After each washing, it would be advisable to dress the ulcers with a salve made of unsalted butter, balsam of fir, and sweet gum wax. Wash the hands well each time after you are done dressing the sores, as bad ulcers have sometimes originated from the neglect of this wholesome precaution, after dressing venereal chancres.

As an internal remedy we would recommend the saturated tincture of the cock-up-hat, or clap-weed, see

page, 214. The common plan of using this is to tincture the root in gin, putting in enough of the root to make it very strong; of this tincture the patient should take a table-spoonful at a dose two or three times a day. Two or three doses of the bitter root should be taken daily to keep the bowels open. These two articles carry off the infection from the body principally by urine and by stools. Sarsaparilla, balsam of fir, and balsam copaiva, have been recommended in the early stages of this disease; but the above simple course, will be found the most efficient and speedy method of cure.

In gonorrhœa or clap, when there is discharges of matter from the urinary passage, the same, internal remedies, above recommended, perseveringly employed will generally effect a cure; be careful to keep the parts well washed from the matter discharged. It is sometimes necessary to give injections of elm or flax-seed tea into the urinary passage, together with frequent washings of the external parts with cold water.

When the disease has progressed, until the general health of the system is affected, it will be necessary to employ repeated courses of medicine in connection with the above described treatment; and this course properly pursued, we have never yet known to fail in effecting a cure.

MILK SICK.

The inhabitants of many parts of the western country are subject to this dreadful, and often fatal malady. Some suppose that the poison is imparted to the milk, by some poisonous vegetable, which was eaten by the cow; others contend that it is occasioned by the vapors which arise from poisonous minerals in the earth, and settle on the grass and other vegetables eaten by the cattle. This latter opinion is strongly espoused, and ably advocated by Dr. Shelton. His arguments we quote for the satisfaction of those who may feel any curiosity on the subject. After stating that it was caused by va-

pors from poisonous minerals, he says; "This fact is clearly proven by many circumstances: First, by the very appearance of the water, and rocks, particularly in the lower parts of Indiana, and other sections where it is very prevalent. Second, the very dogs are affected with it from using the water. Third, it seldom makes its attack till in the summer or fall, after the waters are low, at which time, we know they contain the greatest proportion of mineral, or other *impure* substances; also that vegetable substances at this time become tough, and contain much less juice in proportion to the vapor which settles on them. Fourth, if it had been a vegetable which produced the milk sick, it would have been found long ago; for to my own knowledge, it has been diligently searched for in many places, by numerous people, and not found. Fifth, the scope of land on which it has been taken by the cattle, has frequently been ascertained to be small; and by enclosing it, the malady was prevented. In this case, if it had been a vegetable of any kind, its growth would have extended beyond the enclosure in 30 or 40 years; for I am acquainted with a place in East Tennessee of nearly that age. A sixth proof is, that if the place remain unenclosed, cattle will always be liable to the complaint as long as there is vegetable matter enough of any kind, to induce them to feed on it."

Both cattle and people may have the poison in them for weeks, and even months before the disease shows itself. But when either are over-heated the poison immediately lays hold of the system, and the disease shows itself at once, except on cows giving milk, they rarely die with it as the poison is carried off in the milk.

When the attack comes on the patient experiences a sense of lassitude, great exhaustion, and trembling from slight exertion; often a dizziness in the head, and a burning at the stomach, accompanied with obstinate costiveness, immoderate thirst, and with vomiting; and in all cases the breath has a peculiar smell, which can readily be distinguished from any other poison.

TREATMENT.

As obstinate costiveness always attends this complaint, and as a permanent relief from the vomiting can not be obtained, until the costiveness is relieved, some efficient remedies should at once be adopted for that purpose. The only means that can be relied on, is repeated injections. In some instances as many as forty have been given before the bowels were properly relieved; for bear in mind, that your work is not done, until they are thoroughly relieved; and you must keep the bowels regular throughout the treatment by the same. The injections may be made of warm milk, castor oil, and weak pearl-ash water, or soap suds; or any good laxative injections may answer; for I am not aware that any peculiar indication is to be answered by the injections, except relieving the bowels of the hardened faeces. Dr. Wright, however, thought that injections made by beating up an old cock chicken, feathers and all, and making a tea of it, formed an injection that had a peculiarly beneficial effect in this complaint. We know that this is a good injection, but whether it is better than the one above recommended, we have yet to learn.

In the mean time to relieve the stomach, you must take a handful of the American ipecac root, page, 297, sometimes called wild ipecac, or Indian physic, beat it up and put it into a quart of whiskey. Of this tincture take a table-spoonful at a dose, and repeat it every five or ten minutes until it operates freely and relieves the stomach. In general the vomiting will stop when the ipecac has removed the poisonous contents of the stomach. The ipecac must be continued until your patient is relieved; for it appears to possess a specific efficacy in this complaint. In this instance, Providence has furnished another proof that every country abounds with vegetable remedies for the complaint to which it is subject; for wherever you find a section of country subject to milk sick, there you will find the American ipecac in abundance. If the spontaneous vomiting does not stop after

the ipecac has had its full effect it will be proper to use some antiemetic to check it, see page, 308. "Calomel, tartar emetic, and all such articles," says Dr. Shelton, "are death; because whenever administered in this complaint, they appear to exert a united and deadly influence with the poison which is already in the system."

POISONS.

POISONS are of three kinds, usually distinguished according to the substance from which they are communicated, as animal, mineral, and vegetable.

Animal poisons are communicated by the bites of poisonous reptiles, or the stings of poisonous insects.

The principal mineral poisons are the different preparations of arsenic, mercury, copper, antimony, zinc, tin, lead, &c.; and the alkalies, and acids.

The chief vegetable poisons are sicutæ or hemlock, hen-bane, night-shade, thorn-apple, fox-glove, wolf's-bane, laurel, opium, and several fungi, as the toad-stool or mushrooms, &c.

MINERAL POISONS.

When either of the mineral poisons have been received into the stomach, it soon produces a burning, prickling sensation in this organ, together with excruciating pains in the intestines, followed by vomiting, great thirst, dryness and roughness in the mouth and throat, with great restlessness and anxiety. If proper remedies be not soon administered, inflammation takes place in the stomach and bowels, and this proceeds on rapidly to gangrene; the extremities grow cold; vomiting of black matter ensues, attended with hiccups, and convulsions; and at last the sinking powers of life give up the struggle.

TREATMENT.

No other article in the compass of medicine has exhibited so much power in removing poison from the system, as lobelia. In cases where mineral poisons have been taken into the stomach, administer an emetic of lobelia forthwith, in a quantity sufficient to produce immediate and active vomiting. Laxative injections should also be administered to relieve the bowels; and it would be proper to add two or three tea-spoonsful of the tincture of lobelia to each clyster to arouse the bowels from torpor, and aid in producing vomiting. During the operation of the emetic the patient should drink freely of pennyroyal, or some warming teas to promote vomiting, and wash out the stomach.

After the stomach is well cleansed with the emetic, it would be proper to carry the patient through a course of medicine, which must be repeated every day until entire relief is obtained. As soon as the first emetic is done operating the patient should drink slippery elm tea, and eat some mutton or veal soup, and milk porridge, not only for nourishment, but also to sheathe and protect the bowels against the action of any dregs of the poison that might remain after the first emetic. If the poison has laid some length of time in the stomach before remedies are applied, it will be best to give an emetic of the antispasmodic tincture, administering it in doses of two or three tea-spoonsful, at short intervals, until vomiting is continued long enough to remove the urgent symptoms; then proceed with the course of medicince, and other parts of the treatment as above directed. Should symptoms of inflammation either of the stomach, or bowels occur at any time, they must be removed as directed under these heads. After the disease is removed, use both the bitter and astringent tonic to restore tone to the organs, and promote the general health of the system. Diet should be nourishing, and easy of digestion.

ANIMAL POISONS.

It will not be necessary to enumerate the symptoms, which follow the bite, or the sting of every different kind of venomous serpent, or poisonous insect: such a task would be accompanied with great labor, and yield but little profit in a practical point of view.

The symptoms which follow the bite of a very poisonous serpent, such as the rattle snake, are, swelling first of the bitten part, then extending over the whole body; nausea, and vomiting; a full, strong, agitated pulse; eyes suffused with blood; severe pains shooting from the bitten part, which extort groans, and produce a chattering of the teeth; sometimes bloody sweats break out, and hemorrhages from the nose and ears take place, and in a short time, death ensues.

TREATMENT.

When an individual is bitten by a venomous serpent, if the wound be on any of the extremities, immediately tie a ligature around the limb between the wound and the body, which will have a tendency to prevent the free passage of the poison into the system. Wash the wound immediately with the saturated tincture of lobelia, injecting it to the very bottom of the wound. At the same time take a good dose of the tincture internally. The washing of the wound ought to be continued some time, and afterwards repeated every hour, until the violence of the symptoms are removed.

If the symptoms have assumed an aggravated character before medical aid could be obtained, in addition to the external washing, you must employ the full course of medicine, which must be repeated as often as the symptoms require.

There are many other things that have been recommended; but as none of them are as certain and efficient as the above, we will not trouble the reader with them.

For the bites and stings of insects, washing the wound

with the tincture of lobelia will be sufficient, unless the bite or sting be so venomous as to disturb the system by absorption of the poison; when that is the case, treat it as above recommended.

Should suppuration ensue at the wound, treat it as directed for ulcers. The above simple course will cure the bite of the most poisonous animal; for the lobelia appears to possess the specific property of disarming the poison of its power. In many instances that might be enumerated, symptoms of the most threatening character have been removed in thirty minutes by a thorough application of the above course.

VEGETABLE POISONS.

The symptoms produced by eating or swallowing vegetable poison, are, wildness of the eyes, confusion of sight, giddiness, loss of memory, stupor, nausea, vomiting, distention of the stomach and bowels, costiveness, palpitations and convulsions.

TREATMENT.

The poisonous matter ought to be ejected from the stomach, as soon as possible, by an active emetic. After the emetic has operated, the application of the vapor bath will aid in throwing off the poison from the blood; —relieve the bowels by injections. When the poison is of the narcotic kind, it is sometimes difficult to give an emetic, that will stimulate the stomach enough to make it eject its contents; if the lobelia with a portion of the antispasmodic tincture added to it will not, operate in a short time, give the same by injection, and if the first clyster merely operates on the bowels without producing emesis, repeat the injection until full vomiting is produced.

When the poison is of the acid kind, you must give

some alkali to neutralize the acid, and then throw it up by an active emetic, and after full vomiting has been produced, it would be advisable to give a little pearlsh water to neutralize the remaining acid. The vomiting must be repeated as often as the symptoms indicate its necessity. When the poison is of the alkaline sort, give strong vinegar to neutralize it; and then employ the emetic to throw up the offensive matter from the stomach; then persue the above directed course until the symptoms are entirely removed. Free perspiration must be relied on to cleanse the blood and other fluids of the poison, after the stomach is well cleansed.

HYPCHONDRIA.

This is a chronic complaint, and occurs chiefly in the male;—a similar affection in females is called hysterics. Persons advanced in life, of sedentary, or inactive habits, and those of a studious disposition, and particularly those who suffer their minds to brood over the causes of grief and anxiety, are most liable to attacks of this complaint.

Hypochondria may be occasioned by a sedentary or inactive life, with a close application to study; intense thought, anxiety, and protracted grief; improper aliments; worms in the stomach and intestines; obstructions in the spleen and liver; profuse evacuations, or the suppression of any customary evacuation; excessive venery; intemperance, and too keen a sensibility at any loss or disappointment. Some individuals appear to have a constitutional bias, or predisposition to this distressing disorder, particularly those of a sallow complexion, and a down cast look.

This complaint is characterized by indolence, inactivity, want of resolution, dejection of spirits, apprehension of evil on the slightest grounds, sadness and timidity, costiveness, acrid eructations, with occasional flatu-

tency, palpitations of the heart, giddiness, dimness of sight, spasmodic pains in the head, and other parts of the system, and a copious discharge of pale urine.

Hypochondriacs are generally troubled with a thousand vain and ludicrous conceits; and although this complaint is usually attended with some disordered state of the system, yet it is generally regarded as an affected state of the mind. When recent, it is rather a troublesome and distressing disorder than a dangerous one; but when it continues a long time, it is apt to terminate in incurable melancholy or madness, or in scirrous affections of the liver or spleen, succeeded by dropsy.

TREATMENT.

Some of the principal indications to be answered in the treatment of this disease, is to correct the state of the stomach and intestines, and to restore tone to the whole nervous system, as well as to the digestive organs; and when you can ascertain the exciting cause, direct the treatment so as to alleviate the symptoms that aggravate, and keep up the disorder.

Any crude matter that is on the stomach, ought to be thrown off by an emetic; and if the bowels be costive, relieve them by an injection, and keep them gently open by daily portions of the bitter tonic rendered laxative with the black root. Employ the wine bitters, tonic cordial, tonic tincture, or some good tonic to increase the tone of the digestive organs, and that of the system generally. In addition to this it would be advisable for the patient to take the cold bath frequently, and to rub his flesh daily with a flesh-brush or with a piece of flannel. Care should also be taken to make the patient take exercise daily, as nothing is more injurious to a hypochondriac than indolence, and inactivity.

When the patient is troubled with spasmodic pains, use the nerve powders, or tincture, or if necessary, the antispasmodic tincture, for the purpose of relieving these pains and regulating the nervous system.

A great object with those who attend the patient, should be to amuse the mind as much as possible, and to impress it with a prospect of a thorough cure. The train of distressing thoughts should be broken off by amusements, and gentle exercise; and the apprehension of calamity, or untoward circumstances, however ridiculous, and groundless they appear to others, should not be treated with levity and derision, but by seeming to take a deep interest in his case, take measures for his relief.

Hypochondriacs are generally troubled with some wild conceit, and fancy themselves afflicted in some way, or surrounded with some untoward circumstance:—some have fancied that they were made of glass—others that they were made of china or queens ware—this one was a tea pot, and that one a town clock, &c. &c. Mr. H— of K—, who was troubled with hypochondriacal affections, rising before it was quite light one morning, happened to get hold of the pantaloons of a boy that was sleeping with him, instead of his own; and on attempting to put them on, he found himself quite *too big for his breeches*. As he did not think that his breeches would grow any less, he naturally supposed that he was awfully swelled; and his distempered imagination soon enlarged his dimensions to that degree, that he found himself unable to stand, so falling down he called about him lustily until the whole house was alarmed. His friends ran to him, and with serious concern inquired what ailed him. “What ails me?” surlily replied the hypochondriac, “don’t you see I’m swelled as big as an elephant?” pointing to his feet on which the boy’s breeches were hanging. It was with the utmost difficulty that his friends could persuade him that he had been trying to put on the boy’s pantaloons instead of his own, but when they succeeded in convincing him, he was not only able to stand, but was small enough to get on his pantaloons without becoming any less.

The celebrated Dr. Stevenson of Baltimore, relates an anecdote of one of his hypochondriacal patients, that

we deem worthy of a place, as it demonstrates the advantage of possessing a ready, quick "wit to shoot folly as it flies," in the treatment of this complaint. After the patient had rung the change on every mad conceit hat ever found place in the crazy brain of a hypochondriac, he would have it at last, that he was dead, actually dead. The distressed wife of the patient, sent in haste for the Doctor; and when he arrived he found the patient stretched at full length on his back, his hands across his breast, his great toes in contact, his eyes and mouth closed, and his appearance quite cadaverous. As the Dr. approached the bedside of the patient he said, "Well sir, how do you do? how do you do this morning?" in his blustering, jocular way. "How do I do!" faintly murmured the hypochondriac,—"a pretty question to ask a dead man." "Dead!" replied the doctor. "Yes sir, dead, quite dead: I died last night about twelve o'clock."

Quick as thought, the doctor caught a cue that he he thought would lead to the cure of his patient;—it was to strike him on the string of his character, to which touch he knew every feeling of his soul vibrated with the utmost sensibility. The Dr. immediately felt his pulse, and put his hand on his forehead, as if to ascertain whether it was cold, and then in doleful notes, he exclaimed, "Yes, poor man, he is dead enough—'tis all over with him; and the sooner he can be burried the better." Then stepping up to his wife he whispered to her not be affrighted at the measures he was about to adopt for curing her husband of his wild conceit. A servant was called in, and the Dr. said to him, "My boy, your poor master is dead, and the sooner he can be burried the better. Run to Mr. C——m, for I know that he always keeps New England coffins by him, ready made; and, do you hear, bring a coffin of the largest size, for your master makes a stout corpse, and having died last night, and the weather being warm, he will soon begin to smell."

Away went the servant, and in due time returned with

a suitable coffin. The wife and family in the mean time, having got their lesson from the Dr., gathered round, wailing and howling no little, while they were depositing the body in the coffin. The pall-bearers who had been provided and acquainted with the secret, started with the corpse to the church-yard. Before they had progressed very far, they were met by one of the towns-men, who had been previously drilled by the facetious doctor, who inquiringly said "Doctor, what poor soul have you got there?"

"Poor Mr. B——," sighed the doctor, "left us last night."

"Great pity he had not left us twenty years ago," replied the other, "for he was a bad man."

The pall-bearers proceeded on towards the church-yard, but had not gone far before they were met by another towns-man with the same question. "Well Dr., what poor soul have you got there?"

"Poor Mr. B——," answered the Dr., "is dead."

"Ah indeed!" said the towns-man; "and so the devil has got his own at last."

"Oh you villain!" exclaimed the man in the coffin, "if I were not *dead*, how I would pay you for that!"

As the pall-bearers were resting themselves at the corner of the church-yard, another towns-man stepped up with the old question again; "What poor soul have you there Doctor?"

"Ah!" sighed the doctor, "poor Mr. B——, he is gone."

"Yes," replied the other, "and to hell, for if he is not gone there, I do not see any use for such a place." Here the dead man's patience could endure no longer, bursting off the lid of the coffin, which had purposely been left loose, he leaped out exclaiming, "Oh you villain! I am gone to hell am I? Well I have come back again to pay such ungrateful rascals as you are." Forth with a race was commenced between the dead and living man, to the great consternation of many of the spectators, at the sight of a corpse bursting from the coffin,

and in all the horrors of a moffler and winding sheet, racing with the celerity of youthful vigor through the street. This fantastic chase brought out a copious perspiration on the hypochondriac; and finding he could run a pretty good race, he concluded not to be burried until he was past running. Dr. Stevenson took him home freed from all his complaints; and by using nourishing food, and wine bitters, keeping cheerful company, and taking moderate exercise, he was soon restored to perfect health.

DYSPEPSY.

This complaint has become much more common of late years than it was formerly; and as a burlesque upon the common herd of dyspeptics, it now generally goes under the appellation of the "fashionable disease." The great increase in the number of dyspeptic cases, during the present age, is attributed chiefly, to the increased use of mercurial preparations, and other poisonous mineral substances, as medicine; to the greater prevalence of intemperate habits; and to what is falsely called "*refinements or improvements in cookery.*" The original purpose of cookery was to prepare the food for its more easy mastication and digestion; or in other words, to render it more wholesome and nutritious. This rational purpose has, of late years, become perverted, and the chief design of cookery now, in many places, is to prepare the food most agreeable to the taste, by which, in most instances, it is rendered far more indigestible, and unwholesome. In consequence of this palatable method of preparing food, and the various condiments, & spicery used to provoke the appetite, we are often induced to eat too much. The practice of over-loading the stomach even with wholesome food, injures its tone, and renders it incapable of performing its function in a healthy manner; but how much more must this difficulty be increased, when the stomach is over-load-

ed with food rendered unwholesome, and indigestible by its preparation.

This disordered state of the stomach, is characterized by flatulency, acidity, heart burn, defective appetite, costiveness, giddiness or swimming of the head, ringing in the ears, and palpitations of the heart. In this disease, the mind frequently becomes desponding and irritable, exhibiting a peculiar anxiety in the countenance. During the night, the patient is generally restless, being troubled with frightful dreams, and startings in his sleep; he is much troubled with flatulence, or painful distensions of the stomach and bowels.

This complaint may be brought on by intense study; inactivity of the body; uneasiness, or anxiety; grief; profuse evacuations; improper diet, whether in kind or quantity; hard drinking; great irregularity in the habits of living; immoderate use of tobacco, or opium; deficiency of secretion of the juices concerned in the process of digestion; diseased state of the liver, or spleen, &c.

TREATMENT.

In the treatment of dyspeptic affections, you must remove the causes which produced them, and then invigorate the tone of the stomach by tonics. The management of diet is of great importance in the treatment of dyspepsy:—the stomach should never be suffered to remain any length of time empty, as all the symptoms are aggravated by it; nor should much be eat at a time, and only that which is simple and easy of digestion should be used. Cruditieis, and acidity of the stomach must be removed;—for this purpose, the neutralizing mixture, page, 303, will be found a valuable article. Costiveness must be obviated, and the bowels kept regular. This should not be done by the daily use of cathartics, as that, instead of removing, only increases the difficulty in the end, by destroying the tone of the viscera.

Some physicians recommend the daily use of pulverized charcoal to keep the bowels open, and to scour and

cleanse out the cold, viscid phlegm that clogs the stomach and intestines. Others recommend wheat bran, as being still better to neutralize, absorb, and carry off those acrid and viscid substances which are injurious to a healthy action of the intestines. As a remedy for habitual costiveness, wheat bran has some celebrity, hundreds having experienced its salutary effect. The bran is to be taken in substance, in any way you prefer; and the most proper time of taking it, is in the morning before breakfast; but in cases of great obstinacy, it is necessary to take it two or three times a day. The quantity necessary to loosen the bowels, each patient will have to ascertain by experience; but generally one or two handfuls at a time will be sufficient.

After the above course has been adopted, it will be proper to take some good tonic, as the bitter tonic, tonic cordial, tonic tincture or wine bitters, for the purpose of restoring tone to the digestive organs. Perhaps the following preparation, for a languid stomach and defective appetite, is inferior to nothing else:—take of columbo root two ounces, shave it down fine and put it in a quart of maderia wine, then add one fourth of an ounce of ginger, and a half ounce of essence of peppermint; of this take three or four times through the day, taking also the neutralizing mixture twice a day. When the general health of the system is impaired, a few courses of medicine will be necessary to the success of your treatment.

Be careful to avoid any thing either in eating or drinking that will aggravate the symptoms of the disorder; and any habit, such as close study, constant sitting, late hours &c., that has a tendency to induce this complaint, must be discontinued, or no cure will be likely to be affected.

CROUP.

This disease is a violent inflammatory infection of the mucous membrane lining the trachea or wind-pipe, and

in some instances it extends to the lungs. The inflamed membrane throws out on the internal surface a kind of lymph that afterwards becomes inspissated, and thereby so impedes the passage of air into the lungs as to interfere considerably with respiration.

The croup usually commences with hoarsness, and wheezing; a short, dry cough, and sometimes a rattling in the throat when asleep; great difficulty of breathing; the face is flushed, and the veins of the neck distended. With these symptoms, there is universal restlessness, and an uneasy sense of heat over the whole body, attended with great thirst and a quick pulse. Some writers amuse us with an account of several kinds of croup; but as no great practical advantage can be derived from such nice distinctions, we forbear to trouble the reader with them.

Croup may be produced by any of the usual causes of inflammation; but exposure to cold in various ways, is the most common cause of this disease.

TREATMENT.

The croup is to be regarded as a dangerous complaint, rapidly hastening to a crisis, and sometimes terminating its career in a few hours: active measures should therefore, be taken at once to subdue it at the very onset.

Mild cases of croup can very often be successfully treated with repeated doses of the onion sirup, see page, 359; and by applying to the throat and breast a poultice of the onion,—see article onion page, 222, in *materia medica*. Equal portions of strong vinegar and honey stewed in half that quantity of fresh butter, is also good; and many other articles have been recommended, as valuable in mild attacks; but if the attack be severe, they generally fail. We would therefore recommend as the safer plan to adopt at once that treatment which rarely fails, even in the worst of cases, unless the patient be in a manner dying before the remedy is adopted. Commence by giving the child from half to a

whole tea-spoonful of the saturated tincture of lobelia, repeated every five minutes until vomiting takes place; and if the child be very bad, it may be necessary to repeat the dose a time or two, after vomiting commences, and continue the operation until the symptoms are removed. In the meantime, give the child some warming tea to drink to promote the operation of the emetic;—the more it drinks, the easier it will operate, and the more its good effect will be promoted. The diaphoretic tea would be the best; but as it is difficult to get young children to take it, a tea of pennyroyal, peppermint or hysop will answer. An injection administered as soon as the emetic is done operating, has a very salutary effect. When the emetic commences operating, a free perspiration immediately breaks out over the whole body, which should be kept up until the symptoms entirely disappear; and in truth the application of the vapor bath is very valuable, and in very bad cases, I would employ this important auxiliary to give success to my treatment.

The above course perseveringly employed, rarely fails to effect a speedy cure. Many parents have been perfectly astonished at its success, in cases where they had no hopes of seeing their child live one hour, the little sufferer has been perfectly relieved in half that time.

When acidity prevails in the stomach, it will prevent the free operation of the emetic, unless you administer some absorbent to neutralize the acid; see class of absorbents, page, 302;—the neutralizing mixture will perhaps be the most pleasant for a child to take, and from one to three tea-spoonsful of it will generally answer the desired purpose.

PULMONARY CONSUMPTION.

Phthisis or pulmonary consumption is marked by a general wasting of the body, attended with a cough, difficulty of breathing, fever of the hectic kind and spitting of purulent matter.

The symptoms which mark the commencement & progress, are, a slight fever, which the least exercise increases; a dryness and heat in the palms of the hands, more perceptible towards evening; increase of urine; dryness of the skin, as also of the feet in the morning; occasional flushing in one or both cheeks; hoarseness; either a slight, or an acute pain in the breast; head-ache; sometimes a fixed pain in one side, at others shooting pains in both sides; deficiency of appetite; general indisposition to exercise, or motion of any kind.

The first symptoms of the disease will vary in different cases; but the above it is presumed will be sufficiently characteristic to admonish you of its approach. As the disease advances the general health becomes impaired; the strength gradually decreases; the pulse is smaller, quicker, and softer; the breathing is more anxious from any little exposure to cold, and a sense of tightness and oppression at the chest are experienced; the cough next becomes more troublesome, particularly during the night; at first an expectoration of a frothy mucus takes place, which is generally most considerable in the morning; afterwards this matter becomes more copious, viscid and opake; the urine becomes high colored, and deposes a branny sediment; a hectic flush at times appears on the cheeks; at other times they are pale; the countenance dejected; and the blood vessels on the membranes of the eyes assume a pearly white color. At length a purging comes on, and this frequently alternates with profuse, clammy sweats. General emaciation now takes place; the cheek bones are prominent; the eyes are hollow and languid; the whole countenance assuming a cadaverous appearance. Still however, the appetite often remains pretty good to the very last; and from this circumstance, hope flatters the patient with a prospect of recovery until death terminates his existence.

No period of life from child hood to old ag^e. is exempt from an attack of pulmonary consumption; but its ravages are more extensive in persons between the ages of fifteen and forty. Young people of a slender, delicate

habit, long neck, flat narrow chest and high shoulders, have that conformation of body most predisposed to an attack of this disease. Consumption may also be produced by exposure to sudden transitions from heat to cold; lying in a damp bed, wearing wet clothes; an inflammation of the lungs proceeding from catarrh or cold, terminating in abscess, or causing tubercles. Certain other preceding diseases, may also bring on this disorder, such as the rupture of a blood vessel in the lungs, small pox, measles, and venereal improperly treated; the depressing passions as grief, anxiety, &c.; intemperance; profuse evacuations, as purging, diabetes, the whites, and an immoderate flow of the menses; continuing to suckle too long in a debilitated state. The fumes arising from the poison of certain metals and minerals, and the dust to which certain artificers are exposed, as millers, stone cutters, needle pointers, chimney sweepers, &c., are likewise regarded as causes that occasionally give rise to consumption.

Of late years this disease has become much more common than it formerly was; and this alarming increase of the prevalence of this fatal complaint, has mostly been attributed to the pernicious fashions and customs of our refined age. A late medical writer of some celebrity speaking on this subject says, "While the empire of fashion bears her arbitrary sway, and the followers of pleasure are bound by the fascination of example, and the contagious influence of that spirit which insinuates itself into the bosom of each of its votaries, so long will the sage precepts of wisdom be unheeded, till the emaciated form, the glassy eye, the hectic glow, speak in language too strong to be unheard, that the disease has sapped the foundation of life, and the yawning grave stands ready to receive its devoted victim." The devotees of fashion, however, continue their devotions at folly's shrine, notwithstanding the admonitions of reason, the exalted strains of piety, the forcible appeals of eloquence, and the warnings of the ghastly scenes of disease.

Consumption is always to be considered a danger-

ous disease. An expectoration of purulent matter, a high degree of hectic fever; great debility and emaciation, profuse, unnatural sweats with purging; dropsical swellings of the legs, and the thrush in the mouth, indicate a fatal termination of the disease.

TREATMENT.

Consumption is a complaint more difficult of cure, and more liable to relapse, than almost any other. It is no uncommon thing in this disease, to witness a regular improvement of the patient's health for a few days, giving birth to the fond hope that health would be perfectly restored; but a sudden relapse soon blasts these fond anticipations. On this account, therefore, the strictest measures must be adopted in the treatment of this disease, and the most guarded watchfulness, against any cause likely to produce relapse, must be observed.

In the early stages of this complaint, it may sometimes be arrested by the use of the expectorant sirup, page, 357, and the bitter tonic. The expectorant powders or sirup should be taken two or three times during the night, and the bitter tonic three or four times during the day. The patient should also take occasionally of the diaphoretic powders, and carefully avoid all exposure to damp, or cold. Some cases occur in which the tincture of lobelia, in tea-spoonful doses, used three or four times a day in connection with the bitter tonic, and diaphoretic powders, answers the purpose better than the expectorant powders. The skunk cabbage used in tea-spoonful doses instead of the expectorant powders is also valuable; and so is the tea, or tincture of rattle root.

But as medicines can only produce a salutary effect upon the lungs by restoring a general healthy action to the system, the most successful method of battling this formidable disease, will be to attack it with repeated courses of medicine. No other process in the compass of the healing art, combines so much efficiency and safety in clearing out obstruction, throwing off morbid mat-

ter, equalizing the circulation, and restoring a general healthy action to the system, as the simple process of applying the vapor bath, in connection with the medicines that constitute what is called the course of medicine. The course of medicine should be repeated, if the case be a bad one, every day for a while, using the emetic in the course every other time; and after the lapse of a few days, employ the course of medicine every other day. Between the courses, the expectorants, tonic, and diaphoretic powders, should be used as above directed.

The patient should bear in mind that one of the chief obstacles to his restoration to health will be his discontinuing the use of remedies, when his symptoms become more favorable, and before he is aware, he exposes himself so as to bring on a relapse, even when he thought he was taking care of himself. Recollect that the lungs never rest, but are always in motion day and night, asleep or awake. The irritation of this constant action, as well as the influence of the atmosphere, necessarily retards the healing of the lungs; and consequently, a damp or unhealthy atmosphere, and any exertion that disturbs the circulation of the blood, and action of the lungs, must increase the irritation, and bring on a relapse.

However averse the patient may be to it, the course of medicine must be resorted to, and repeated as above directed whenever a relapse occurs. Many a curable case of this complaint, no doubt, has been lost, because the patient would not observe strictly, the directions, both in taking medicine, and guarding against exposure.

Gentle exercise in a salubrious atmosphere, is very important; and confined or unwholesome air should be avoided; hence large towns, and cities, are not a suitable place for consumptive patients.

ATROPHY.

This dangerous complaint is also called nervous consumption. It is characterized by an aversion to food,

with a weak, impaired digestion, and by a wasting of the body, and sinking of strength, unattended either with a cough, difficulty of breathing, much fever, or other hectic symptoms.

The symptoms which mark this disease, in its commencement and progress, are, languor, loss of appetite, impaired digestion, depression of spirits, loss of strength as well as flesh; the face is pale and squalid, and the habit is disposed to dropsical swellings; the urine is generally high colored, and voided in small quantities; there is but little fever, and little difficulty of breathing, unless what arises from extreme debility. Sometimes the belly becomes prominent, owing to the enlargement of the mesenteric glands, which indicates a scrofulous habit.

This species of consumption may be produced by eating food destitute of a sufficient portion of nutriment, by weak digestive powers, too copious evacuations, too free indulgence of sensual gratification, intemperate use of spirituous liquors, unwholesome air, grief and anxiety of mind; by the decay of the powers of life from age or previous disease; by worms in the alimentary canal; and by an enlargement of the liver, spleen, pancreas, or mesenteric glands.

TREATMENT.

You must first ascertain the cause which produced this disease, and commence your treatment by removing it. If excessive evacuations, such as purging, profuse menstruation, whites, &c., have induced the disease, these must be removed according to the directions given under these several heads. At the same time, the patient's strength should be recruited by generous, nourishing diet, gentle exercise, and by two or three doses daily of some good tonic; see class of tonics, for various recipes. If the disease originate from giving suck too long, or from excessive indulgence in sensual gratifications, or from intemperance, these must be desisted from and the strength restored as above directed. When the dis-

ease is induced by affections of the liver, spleen, mesentery, &c., remove the cause by the means directed under these heads, and then restore the health by the above directed course. These directions we deem sufficient to enable any person of good judgment to manage a case of nervous consumption, as the treatment has to be governed by the exciting cause of the complaint.

DISLOCATIONS, AND FRACTURES.

It is no difficult matter for any person of judgment, to ascertain when a dislocation or fracture of a bone has taken place. Nor do we deem it necessary to give particular directions for reducing a dislocated, or fractured bone; for almost any man of good common sense knows how to do this when the muscles are properly relaxed. The principal thing necessary on this subject will be to prepare the fractured or dislocated part for reduction, by properly relaxing the muscles of the part.

We heartily concur with a distinguished physician of the old school, in saying that the world is indebted to Dr. Thomson for the simplest, and best method yet known to effect this. The plan recommended by Dr. Thomson possesses the double advantage both of preventing in a great degree the excruciating pain that usually attends the reduction of fractured bones, and dislocated joints, while at the same time, it is the most efficient, and easiest plan that could be adopted.

First administer a good dose of the nerve powers, to which add a half tea-spoonful of cayenne; this will tend to quiet the nerves, prevent fainting, and promote perspiration. Then apply a large cloth wet in warm water, hot as it can be borne around the injured part, letting it extend some distance above and below it. Now place a vessel under, and pour water on the wet cloth, hot as it can be borne: continue this fifteen or twenty minutes, then the cloth must be taken off, and the bone or bones,

as the case may be, placed in their proper situation, by some skillful person. If it be a fractured bone, after it is set it should be splintered and bound up to keep it in its proper place; but if it be a joint out of place, nothing more will be necessary after it is reduced than to pour a little cold water on it to contract the muscles, and keep the bone in its proper position. To prevent swelling and inflammation, observe the directions given under these heads.

PROLAPSUS ANI.

This complaint, sometimes called falling of the fundamen-t, is characterized by a falling or protruding of the rectum out of the anus. It is most commonly met with among children of a weak habit, and those afflicted with severe purgings. Grown persons of a peculiar weak-ness in the part, are also liable to be afflicted with pro-lapsus ani.

TREATMENT.

This complaint, though troublesome, is not dangerous; nor is it very difficult to cure.

Wash the part protruded with some astringent tea, as red oak bark, bayberry, witch hazel brier root, or some-thing of the kind; and administer an injection of the same. The washing should be repeated frequently until a cure be effected. The patient should use daily two or three doses of the bitter and astringent tonic until the com-plaint is removed.

FALLING OF THE PALATE.

The falling down, or elongation of the palate is attend-ed with a sense of tickling in the fauces, and soreness at the root of the tongue.

TREATMENT.

Avoid speaking, as much as possible, or any thing else that will irritate the part. Gargle the throat frequently with some astringent tonic article, and drink freely of the sudorific powders. A strong tea of red oak bark sweetened with honey makes an excellent gargle for this purpose. Dr. Ewel recommends the application of pepper and salt to the palate, by means of a spoon handle, when there is little or no inflammation.

FAINTING, OR SYNCOPÉ.

Fainting is characterized by a decreased action of the heart and lungs, and sometimes by a total suspension of their action for a while.

This temporary derangement of the motion of the wheels of life, may be caused by sudden, violent emotions of the mind, as joy, grief, fear, &c.; by pungent, disagreeable odors; derangements of the stomach, and intestines; debility from disease, or from the loss of blood; and by tight lacing.

TREATMENT.

Sprinkle the face and bosom with cold water, during the paroxysm or fainting fit. This in many instances is sufficient to restore the lost action of the heart and lungs. Holding heartshorn to the nostrils is both useful and proper;—camphor is frequently used for the same purpose. Essence of peppermint or that of winter green, is perhaps much better than the above named articles. If these do not relieve the case, and set the wheels of life in motion again, forthwith administer a stimulating injection, if you can get nothing else, water about blood heat with a little salt and pepper in it will do; and if any means will rouse to animation, the stimulating injection will.

Where derangements of the stomach or bowels exist, they must receive proper attention according to the directions under these heads, when the patient has been roused to animation.

When debility from previous disease, or from accidental loss of blood be the cause, after the patient has been restored to animation by the above means, restore tone and vigor to the system by the use of tonics, and a good, nourishing diet.

SUSPENDED ANIMAMION.

By this is meant a suspension of the animal functions, without the entire extinction of life, by some violent cause as drowning, hanging, or suffocation, extreme cold, or lightning.

DROWNING.

Dissections of drowned persons do not show that any of the organs essential to life are injured; it is therefore evident that suspension of life, in drowning is caused by the want of that stimulus which the living power derives from the air, according to the principle we have laid down in our remarks on the means of sustaining the living power, page 45. In drowned persons the right cavity of the heart, together with the veins leading to, and the arteries leading from it, are filled with blood, whilst every other part of the blood vessels are quite empty.

Livid, and dark brown spots on the face, with great rigidity and coldness of the body; a flaccid state of the skin, and a glossy appearance of the eyes, are said to be an indication of the perfect extinction of life. Where these symptoms are not present, when a body is taken out of the water, every means for restoring animation should immediately be resorted to, for aught we know,

this may enable the now motionless machine to resume its motion, and perform its wonted functions.

TREATMENT.

On taking the body of a drowned person from the water, it should immediately be conveyed to the nearest house, in the most expedious manner that it can safely be done; for remember that delays increase the probability of a failure to resuscitate the patient. Care should be taken in carrying the body to the house, and in handling it afterward, not to let the head hang down; but to keep it in the most natural position. As soon as possible strip off the wet clothes wipe the body dry with a flannel or woolen cloth, and wrap it in a blanket first warmed before the fire. An injection ought now to be given, which some of the attendants ought to prepare while others are stripping him, &c. The injection may be made of pennyroyal, or peppermint tea, or even of warm water, and to this must be added one fourth tea-spoonful of cayenne, or if not at hand, a pod of red pepper, or a half tea spoonful of black pepper may be used, also a tea-spoonful of the tincture of lobelia, or its equivalent of the seeds or leaves, and a tea-spoonful of the diaphoretic tincture. This should be injected about blood heat, and kept in the rectum some time, by applying a cloth to the fundament if necessary. The injections must be repeated at intervals as often as the circumstances may require. While this is attended to, some of the attendants should make the necessary preparations for applying the vapor bath, which should be applied as expeditiously as possible. Perhaps the most convenient method will be to lay the patient on his back in a bed, cover him with a blanket, which should be kept up from the body by means of half hoops; then set a pan of hot water under the blanket at the foot of the bed, into which put a warm rock, so as to raise only a very gentle steam; for bear in mind a hot steam would prove fatal by raising the external heat too high. The steam may slowly

and gradually be increased as the signs of returning life make their appearance. A dose of the antispasmodic tincture should now be administered, and repeated as circumstances require: a half tea-spoonful will perhaps be about the proper dose.

When the senses become restored, the patient should drink freely of the diaphoretic powders, and keep up the perspiration eight or ten hours. If at the end of this time, he should continue listless, dejected, and silent, carry him through a full course of medicine. After this replace him in bed, and keep up a gentle perspiration for some time;—nourishing food, and reviving cordials, will be necessary.

HANGING.

When the neck is not broken, the external appearances are very similar to those discoverable in a drowned person; and the means used for resuscitation may be the same.

SUFFOCATION.

Under this head, are included all cases of suspected animation, that are caused by breathing noxious gases, such as carbonic acid gas, usually called damps, which is often found in wells, cellars, vaults, &c., in sufficient quantities to destroy life; hydrogen, nitrogen, and some other gases are also noxious.

When the air inhaled into the lungs is composed chiefly or entirely of noxious gases, an immediate suspension of the animal functions is produced; but if the noxious gases are not inhaled in such great quantities, the animal functions are not entirely suspended, though they are performed in a very feeble and imperfect manner. In cases of this kind, the symptoms, on first inhaling the gases, are, giddiness, head-ache, stupor, faintings, numb-

ness, and sometimes convulsions. In a short time the face and neck swells; the eyes are protruded from their sockets; the tongue hangs out at one side of the mouth, and frequently the jaws are firmly closed upon it; the face is livid, and the lips blue; the abdomen inflated; and the person appears to be in a deep sleep.

TREATMENT.

Where animation has been suspended by inhaling noxious gases, you may first commence by dashing cold water in the face and breast of the patient, and at the same time expose him to a free, pure air. A stimulating injection similar to that recommended in cases of suspended animation from drowning, should be administered as soon as possible, and repeated as circumstances require.

Hartshorn should be held near the nose; the face and temples should be bathed with pepper and vinegar, or with camphor. Some physicians recommend to inflate the lungs as is done in trying to resuscitate a drowned person; and if oxygen gas can be had, to inflate with that.

A small portion of the antispasmodic tincture should be added to the injections; and a half a tea-spoonful of it should be put in the mouth, wh ch will relieve the spasms in the jaw; if one dose be not enough, repeat it. After the patient is restored to animation, if he appear languid and listless, treat him as directed for drowned persons, where similar symptoms occur.

FREEZING.

When a person is exposed to extreme cold for a length of time, the countenance becomes pale and shrivelled; the limbs grow stiff; the chilled blood ceases to flow, and the throbbing heart fails to beat. This suspension of animal power, is always preceded by an excessive

desire to sleep which the strongest resolution is incapable of overcoming.

TREATMENT.

When the vital flame is entirely extinct from freezing, I do not suppose any means can be employed to rekindle it; but while a small spark remains, although the patient be motionless, the proper means may reanimate him.

We will give the reader an example of the treatment of such a case which we think will sufficiently illustrate the method of treating such cases.

Shortly after the close of the revolutionary war, when the settlers in Western Virginia were few, a little girl was sent to a neighbor's house, which was about three or four miles distant. The day was extremely cold, and shortly after she started, a piercingly cold north wind rose and met her in the face; this gave the cold a greater impression upon the system, and by the time she reached the house, she could neither speak nor move. Fortunately the horse stopped before the door, where he did not stand long until some of the inmates of the house discovered his almost lifeless burden. The good old lady of the house shrewdly suspecting the little girl to be past helping herself, soon ran out to ascertain the fact. Upon discovering she had neither the power to speak or move, the good old matron soon raised all hands on the premises to take measures to reanimate the little girl. Forthwith she was put in a fine large spring, near the house, and was kept under the water, with the exception of her head, until the frost was thoroughly extracted, and the patient had recovered the use of her limbs. She was then taken out of the water, and unceremoniously stripped of her wet clothes, rubbed off instantly with a dry flannel cloth, wrapped in a warm blanket, carried to the house, and laid in a warm bed, after which, by drinking some warm teas, she soon felt perfectly relieved from all pain, and was able to ride home the next day. This circumstance occurred in A-

gusta county Virginia, and had this plan of treatment been an inefficient one, this book would never have been written. We would, however, recommend, that after the patient is put to bed, diaphoretic teas should be administered, and other means used to raise a perspiration and free the system entirely from the effects of the cold; if this be done no foundation will be left for a consumption, or some other dangerous disease. An injection would be very serviceable, and should be administered.

When a person gets his hands or feet frost-bitten, he should not go to the fire to warm them before the frost is abstracted, as that produces great pain, generally succeeded by inflammation, which, in many cases has terminated in mortification. First hold the frost-bitten limb in cold water, then in spring water, drinking at the same time some diaphoretic teas to keep up the internal heat, and prevent the blood from becoming cankered. After this is done, wipe the frosted limb dry with a flannel cloth, then bathe it with bathing drops, applying them with brisk friction. Drink freely of the diaphoretic powders. Warm goose grease has been recommended by some, as being the best application that can be made to a frost-bitten limb:—it is applied by frequent, or rather, by nearly constant bathing, until life and circulation is restored to the part.

LIGHTNING.

The system appears to be exhausted of its stock of nervous power by a stroke of lightning, which is supposed to be the reason that the blood of a person so killed, does not coagulate, nor his limbs become stiff. When the action of the electric fluid has been very great, a degree of disorganization takes place;—the appearance of the brain is altered, the membrane enclosing the brains is bursted, some of the blood vessels are ruptured; bleeding at the nose and mouth ensues; and the skin where

the electric fluid passed along, is driven into ridges, which assume a dark or black color, and speedily run into putrefaction. In such cases, no effort to resuscitate the person will avail any thing; but where no such violence has been sustained, means may be used; for sometimes, individuals apparently dead, have been restored.

TREATMENT.

The extremely flaccid, soft and loose state of the muscles, as well as of the blood, which succeeds a stroke of lightning, indicates the propriety of using something that would tend to correct this state by restoring firmness, and tone to the relaxed muscular fibers. Dashing cold water by buckets-ful on the patient, is said to answer this purpose. This treatment was recommended in the year 1818, by the Royal Humane Society. The water should be dashed on suddenly so as to operate like a shock; and should be repeated ten or fifteen times, in as many minutes. Continued frictions, and occasional inflations of the lungs should be practiced. Gentle shocks of electricity, when passed from the chest to the back, have been recommended as valuable to give firmness and tone to the relaxed fibers. Some physicians recommend the rubbing of the breast with a strong decoction of pepper and vinegar; or applying to it, a few red pepper pods turned inside out, and steeped in vinegar, so as to soften them. Dr. Good advises stimulants of the most active kind, to be given both by the mouth and by injections.

RUPTURE, OR HERNIA.

This is an unnatural protrusion of a portion of the contents of the abdomen, through the lacerated fibers or muscles of the part, where the swelling occurs. Accidents of this kind are most common to elderly persons, and to children. In adults they may proceed from some

violent, or sudden exertion, as jumping, wrestling, &c.; and by straining to lift heavy weights, or by receiving some violent thrust about the abdomen, that lacerates the muscles and fibers of the part, without lacerating the skin. In children it sometimes proceeds from hard crying, coughing, vomiting, and the like.

TREATMENT.

On the first appearance of the rupture, means should immediately be employed to replace the protruding portion of the intestines, as there is danger of the parts becoming inflamed, by which it is often so enlarged that it cannot be returned, and in some instances of this kind, mortification has ensued.

Lay the patient on his back, raising his hips by means of pillows, or bed clothes folded up, so as to make them higher than his head. If the protruded part be not swelled, endeavor to return the intestine that protrudes, by a gentle pressure with the fingers, through the same opening at which it had come out. This operation requires more dexterity than force, so as not to injure the parts. If the patient has arrived at the years of discretion, he can manage it to more advantage himself than any one else.

But if the part be swelled and inflamed, you must evacuate the contents of the bowels by injections of flax-seed or cataip tea, or something of the kind with a tea-spoonful of the tincture of lobelia in each injection. Next apply fomentations of bitter herbs, as hoarhound, catnip, wormwood, tansy, mayweed, hops, camomile, or marshmallows, bathing it occasionally with the *relaxing ointment*, page 365, or with the *green ointment*, page, 367. Continue this operation until the constriction is relaxed, and the swelling so reduced, that the protrusion can be replaced. When this has been accomplished, apply a truss to keep it to its place, which must be worn some length of time, to enable the ruptured walls of the abdomen to close, and heal up sound. In the "American

Practice," bathing the part under the truss three or four times a day with the extract or syrup of oak bark is highly recommended as promoting the cure. This extract is made by boiling the bark slowly, long enough to extract all its virtue; then strain off, and continue the boiling until the extract is reduced to the consistence of thick molasses.

WORMS.

Of the various kinds of worms, which infest the whole intestinal canal, systematic writers make three general classes. Those which inhabit the whole range of the intestinal canal, are ranged under the first class,—they are the *teres* or long round worm; the long thread worm, the long tape worm, the broad tape worm, and the fluke or flat two headed worm. Those which exclusively inhabit the lower part of the intestinal canal, belong to the second class;—they are the thread worm, mane worm, and the bot worm. The third class includes such as are not considered natives of the human body, but accidentally enter the stomach, and intestines. They are the hair worm, the erratic leech, and the maggot worm.

The symptoms indicating the presence of worms are so various, and contradictory, and so often resembling the symptoms of some other disease, such as croup, inflammation of the brain, liver, &c.; pleurisy, bloody flux, &c., that it would be impossible to give all the symptoms. Some of the following symptoms, however, will generally be found present, when the health of the patient is affected by worms:—swelling of the upper lip, pecking at the nose, grinding of the teeth; pains in the stomach, gripings, and looseness; foetid breath, starting and crying in the sleep; a peculiar paleness about the mouth; hardness and fullness of the belly; a short dry cough; nausea; fever, and sometimes, convulsions.

Worms may exist in the alimentary canal a long time without producing any unpleasant symptoms; but the

following causes may set them to work, when some of the above described symptoms will indicate their presence and injurious effects upon the system:—Eating unripe fruits; sucking unwholesome milk; indigestible vegetable food; weak digestive powers; and a preternatural quantity of mucus, or slimy matter in the stomach and intestines.

TREATMENT.

In the treatment of complaints of this kind, three objects should be kept in view:—First, to cleanse the intestinal canal of the morbid, mucus matter in them, which is supposed to be the element in which the worms revel; secondly, destroying, and removing the worms by the use of those medicines called anthelmintics, or vermifuges; thirdly strengthening the system generally, and the intestines in particular.

To accomplish the first object, cleanse the stomach with an emetic, and cleanse the intestines with a few doses of the butter-nut sirup, which is ascertained to be not only one of the safest cathartics, but has been found to answer the purpose, desired in this case, most admirably.

To accomplish the second object, various articles have been recommended, see class of *anthelmintics* both in *materia medica*, and in the dispensatory. These medicines, however, are of a more doubtful character; for any medicine that will kill worms, has a direct tendency to weaken the tone of the stomach, and intestines; and on this account, they have a considerable tendency to defeat the other intentions of a cure. The use of tonic medicines, answers the third indication in the treatment. A strong tea of poplar bark, used in connection with the butter nut sirup, very often effects a cure without any thing else. When this will answer, it is a very salutary medicine, as it possesses in connection with its anthelmintic properties, a tonic power. We have known it administered in some very bad cases, with the utmost success, whilst in other cases we have witnessed its ex-

hibition attended with but little success. Other vermicifuges may be used, at the discretion of the practitioner, whom we refer to the class of these articles, where he will find them described, together with the method of administering, and the quantity for a dose.

Oilate, charcoal has acquired considerable celebrity in the schools of Europe as a valuable medicine for worms. It is administered freely in substance, being a perfectly safe medicine.

Spirits of turpentine used in connection with the butter-nut sirup has been successful in expelling the tape worm. In the general Index, under the word *tape worm*, the reader will find a reference to other articles, that are recommended as useful in expelling the tape worm. For a child, the dose of the spirits of turpentine is from a half to a whole tea-spoonful. After taking three or four doses of the turpentine, it should be followed by a dose of the butter-nut sirup.

HOOPING COUGH.

This complaint is mostly confined to children; and is characterized by a suffocative, convulsive cough, attended with a deep, shrill sound, termed the whoop, from which it derives its name, hooping or whooping cough.

At first, very little expectoration attends the cough, but it gradually becomes more copious. The matter expectorated is always tough and viscid, and this is one cause of that peculiar difficulty, and great exertion, always attending this cough, which is often so great that the face becomes bloated, and turns purple, the eyes swell and become prominent.

TREATMENT.

The indications to be answered in treating this complaint are to relieve the spasmodic irritation, and promote

the expectoration of the tough phlegm by loosening it. For the above purposes you may give first an emetic of the tincture of lobelia, which should be accompanied with a portion of the nervine tincture. The tincture of lobelia should be given twice a day in nauseating doses, and followed by the tincture of lady's slipper in ten or fifteen minutes. The proper time for exhibiting it, is in the morning, before breakfast, and at night, before going to bed. During the day the patient may drink frequently of the diaphoretic tea, which may be sweetened to make it more palatable.

The pulverized skunk cabbage root, administered in doses of from a fourth to a half tea-spoonful, combined with honey, is valuable in this complaint, as it is both loosening to the cough, and quieting to the nerves. The good effect of these remedies may be promoted by bathing the back, and stomach with pepper sauce, or with bathing drops. It should be applied frequently with gentle friction, along the back bone, breast bone, and over the region of the stomach. Relieve the bowels of costiveness by injections of catnip tea with the addition of a tea-spoonful of the diaphoretic tincture. In very bad cases, the course of medicine will be found valuable. The bitter tonic should be used to give tone to the system generally, as well as to the digestive organs.

WHITE SWELLING.

Of this most painful disease, different writers give various, and even contradictory accounts. This discrepancy, probably, arises from overlooking the different varieties of the disease, which are distinguishable according to the seat of the disorder.

The first species has its seat in the synovial membrane of the joints, which is the membrane enclosing the glands that secrete the unctuous matter intended to lubricate the joints in their various motions. This species is called

the rheumatic kind, and is sometimes mistaken for chronic rheumatism. The second species is seated in the cartilage of the joint. It usually commences with a sense of stiffness, the part enlarges, and the joint sometimes becomes perfectly stiff. When the cartilage ulcerates, the pain becomes excessive, a hectic fever ensues, and the unfortunate sufferer is gradually reduced to a state of extreme debility. The third species, which is the most common kind of white swelling, originates in the cells of the bones. This kind is frequently called the scrofulous kind. The bone ulcerates, abscesses form; the soft parts swell, and the limb is puffy and elastic. The abscesses form along the bone following the courses of the cellular membrane, forming those long, narrow, hollow tracks called sinuses:—sometimes they extend to the heads of the bone, and invade the cartilages.

In all the varieties of white swelling there is but little if any discoloration of the skin over the swelled part, from which circumstance it takes its name. As the disease advances, the violence of the pain increases, and the swelling becomes more considerable, until it finally breaks, and discharges matter.

TREATMENT.

In all cases, when you discover that a white swelling is about to rise on any part, you should attempt its cure before suppuration takes place. By doing this, much time and money may be saved, and much pain prevented. The drug poultice, page, 379, should be applied to the swelling as soon as you discover it coming; and it will not fail, one time in ten, to put it back, and perform a cure without suppuration, unless matter has commenced forming at the bone before the poultice be applied. But if matter has commenced forming at the bone, this poultice will draw it to a head much quicker, and with much less pain than any thing else, with which we have any acquaintance. It also has a powerful tendency to prevent the bone from being injured, which gen-

erally happens in this complaint. The poultice should be wet as often as it dries, with whiskey or with bathing drops:—it is important to keep it moist. A local application of a medicated vapor bath has also been recommended, which we would judge to be very valuable. Take of catnip, mullen, mayweed, and wormwood each a double handful, and boil them in four quarts of water, to which add one pint of soft soap. Then place the affected joint over the steams arising from this fifteen or twenty minutes, covering it with a blanket in such a manner as to confine the vapor to the diseased part alone. This local vapor bath should be applied once a day until the pain and swelling disappear.

When a white swelling has run on until it breaks, the treatment then may be the same as that recommended for *scrofula* to which the reader is referred.

SPASMODIC CHOLERA.

This fearful disease had its origin in Asia, in the year 1816; and hence it is often called *Asiatic cholera*. After spreading devastation over many parts of the continent of Asia, about twelve years, it visited various isles in the Chinese sea, and in 1829 entered Europe. Continuing its destructive career, it traveled over many kingdoms of Europe, but little restrain'd by any means employed for that purpose. In 1832 it visited various points on the American continent, where it soon gave melancholy proofs that its virulence was but little abated by a passage across the Atlantic.

We shall attend only to give the general and well marked symptoms of the complaint, without noticing every deviation from the ordinary course of the disease, or paying much attention to the distinctions of what are called different stages of the disease, as they are more curious than valuable, being of but little importance in a practical point of view. All that is needed is to be informed

of the symptoms that indicate the approach of an attack, and those showing when the disease has certainly attacked.

An attack of this complaint is generally preceded by frequent discharges from the bowels, followed by great exhaustion, sinking, and emptiness; sickness at the stomach and vomiting, either precede or attend these symptoms. After a short time, giddiness or swimming of the head, ringing in the ears, faintness, and coldness of the skin occur, with a loss of the power of moving. About this time, a twitching in the muscles of the fingers and toes are felt, and these affections gradually extend to the trunk. The pulse from the first, is small, quick and weak; but on the commencement of the spasms, it suddenly sinks until quite imperceptible;—the skin, which from the first of the attack is below the natural heat, grows colder and colder as the disease advances; and is generally covered with a clammy moisture. The eyes sink in their orbits, and are surrounded with a dark or livid circle; the countenance assumes a cadaverous aspect, its peculiarly strange, and unnatural appearance is observed by all. The desire for cold water is generally great; the tongue is moist, cold, and whitish. A burning heat, and a distressing pain at the pit of the stomach are very common in this disease. After the first vomiting, and discharge by stools, however, severe these symptoms may be, the matter passed by stool is of a watery consistence;—sometimes destitute of color, at others resembling muddy water; but most commonly they resemble rice water.

After a longer or shorter time the collapsed stage comes on, in some instances so suddenly as to prostrate the individual to the earth. This stage of the disease is of short duration, as the patient must quickly be relieved by medicine, or he will be cut off by death.

TREATMENT.

If properly attended in the early stages, this fatal scourge of nations, appears as easily managed, as any

other complaint whose symptoms progress as rapidly and as violently. Commence your treatment for the early stage, by giving the *cholera sirup*, page, 384, in table-spoonful doses, repeated every twenty or thirty minutes, if the violence of the symptoms require it. Proper means must at the same time be used to promote a free perspiration, which must be kept up without suffering any sudden check until the symptoms are entirely removed. In the mean time the stomach, and extremities should be bathed with a strong decoction of pepper and vinegar, or some other stimulating wash, applied with much friction. If nausea and vomiting do not disappear by the use of the above remedies some of the antiemetics must be administered without delay. When a copious perspiration is once raised, you must keep the patient in bed, and keep up the perspiration, from twelve to forty-eight hours, according to the violence of the attack. By the above simple means, you will generally check the disease if taken in time; but as there is great danger of a relapse, it will be necessary to continue the use of the sirup for several days, three or four times a day and gradually taper off from its use;— avoid cold, damp, night air, or any exertion.

But if the above treatment prove unavailing, or if the collapsed stage has come on, in connection with the above course, you must employ the antispasmodic tincture freely; and injections with two or three tea-spoonsful of the same in each, should be used. Preparations must be made for applying the vapor bath to the patient in bed; and some of the best stimulant diaphoretics must be given internally; for if a free perspiration can be raised, and kept up, you have gained an important object, and the free use of the above remedies will then generally effect a cure. Continue the perspiration, for twelve or twenty-four hours after the symptoms disappear. The same directions in the use of the sirup, &c., must be observed, as were above given to prevent a relapse, you must, however, adapt the treatment to the greater debility, and hazard of a relapse.

PART IV.

OF MIDWIFERY, AND THE DISEASES PECULIAR TO WOMEN AND CHILDREN.

INTRODUCTORY REMARKS.

WOMEN are not only liable to all the ordinary diseases to which men are exposed, but in consequence of their sexual organization, they are also subject to many diseases peculiar to themselves. The organic machine in women is more complex than in men, and the functions performed by these organs are easily deranged, from which diseases of an inveterate and dangerous character, often arise. And from the very nature of female diseases, and the indelicacy of explaining the nature of the symptoms to doctors, these diseases are often suffered to run on until health is finally destroyed. While modesty, and delicacy of feeling, the brightest gems that adorn the female character, are cherished in the female bosom, hundreds will patiently bear the agonies of disease, and brave the terrors of death, rather than make disclosures, and submit to exposure before strange men, at which every sentiment of delicacy recoils with the utmost abhorrence. These sentiments of delicacy and modesty, are the bulwarks of female chastity and virtue;—break down the former, and we have no security for the preservation of the latter. The practice of calling upon men in ordinary cases of child birth, is manifestly repugnant to every principle of virtue, and is unsparingly reprobated.

ted by many of the most distinguished physicians, who have been an ornament to the profession for the last century, as being a means of sacrificing delicacy and chastity; and has been kept in countenance only by a crafty imposition practiced upon the credulity of women, and the fears of their husbands. The Allwise Creator never gave woman that virtuous sensibility, which constitutes one of her noblest charms, that its sacred rights should be wantonly trampled upon. We are apprised that some attempt to justify this practice, by saying that child-birth is an extraordinary occasion, and that it is the duty of women to conquer their feelings of false delicacy. We frankly confess that we have no partiality for such philosophy; for we can as readily believe that hunger is a false, deceptive sensation, and should therefore be overcome, as that this sense of delicacy, which Heaven has placed as the sentinel of virtue, should be so far gagged as not to express its abhorrence at the interference of men in cases where necessity does not demand it, and where the laws of modesty, and sentiments of chastity absolutely forbid it. All needless familiarity between the sexes gradually weakens the sentiments of chastity, and destroys the feelings of delicacy and modesty:—this is not a mere whim of our own, but has been a matter of observation for many years, by the discerning. Every friend of virtue ought therefore to contend for the practice of midwifery to be restored to the hands of the women where it anciently was. Decency, delicacy, reason and virtue, all conspire to demand the restoration of this business to the women as it was in the beginning. No good reason can be shown to prove the impropriety of this; for women have the capacity to learn every thing necessary to the successful practice of midwifery. “Every day,” says Ewell, “shows that the practice of midwifery requires no particular skill, no superior knowledge, no slight of hand, nothing beyond the most common sense and observation to do all that is required, with perfect success.” Women are endowed by nature with capacity to learn, and can therefore acquire all the

knowledge, that science can teach on the subject, and that is all that a doctor can do; but women have other facilities for acquiring knowledge of the business that a doctor never can possess. And in addition to all these considerations, women are endowed with other qualifications by nature, that render them much more suitable to discharge the duties of a midwife than the males. The general habits and temper of men, render them too *inpatient* in attendance on those tedious cases that occur in child-birth; and hence say Drs. Denman, Buchan, and Ewell, "Their hurry, their spirit for acting, have done the sex more harm than all the injudicious management of midwives, of which they are so fond of talking." On the other hand, women are furnished with small hands, and a more delicate use of touch;—important qualities for an accoucheur: they are also endowed with an unceasing, persevering, *patience* in attendance on the sick; and their own experience qualifies them to sympathize with the sufferer, and extend that encouragement and consolation, which the trying moment demands. Furnish woman with the requisite knowledge, and in every respect she is better qualified to attend the suffering female than any physician.

The Danish government, convinced of the impropriety and immoral tendency of the employment of men as midwives in the management of cases of natural labor, has established schools for the instruction of women for this purpose; and several of the German states have followed the same example. We appeal to the female community to put a stop to the practice of calling on men in such cases; and we appeal to all who may have any wish to practice midwifery to obtain books, and qualify themselves to attend successfully not only all natural cases of labor, but also the difficult ones. It is in your power, by taking proper pains, to acquire as perfect a knowledge of the subject as any man can. Your good sense, your delicacy, and your virtuous feelings all approve of the plan we recommend. Then why not adopt it? Do not think that the subject is too difficult to un-

dertake; nor yet should you think it too indelicate. Nature's Author has assigned you certain functions to perform, every one knows that you must perform them. Certainly you can not think that there is as much indelicacy, in privately acquiring the proper information to aid each other as there is in exposing yourselves to the hands and eyes of strange men! You must be apprised that those familiarities that are, and that must be taken by men in the discharge of the duties of an accoucher, naturally tend to obliterate that delicacy of sentiment, and remove those salutary restraints, by which chastity of feeling is preserved, and immoral familiarities, and undue liberties prevented. Every exposure in submitting to the unnecessary examination of physicians, is an indecency that makes a direct attack upon the purity of virtue, and the chastity of sentiment, and in thousands of instances, has kindled criminal desires, and lead to criminal practices when they were thought to be more innocent employed. No practice that thus directly tends to sap the foundations of virtue, should be continued, or countenanced by the customs of any Christian community. The interest, and the duty of all, is to preserve the original delicacy of feeling, and purity of sentiment; —it will have a most powerful and salutary influence over the character of the age; for our daughters will more or less partake of the prevailing manners of the times. They will be chaste, and refined; or indelicate, and unprincipled as their associates are. Then make yourself acquainted with these things, —they are of great importance to you; and you will find yourselves in no disposition of capacious to comprehend the subject as well as any physician. You will soon learn that nature is simple, and her operations in most cases are simple; and in ninety-nine cases out of a hundred, you will meet with little difficulty.

We are apprised that much artifice has been employed by some professional men to secure to themselves a lucrative business. Physicians of this cast are frequently telling marvelous tales about the hair-breadth escapes

of numerous women to whom they had fortunately been called just in time to save life. The reiteration of these tales in the presence of women, with an affected air of some deeply mysterious difficulty in the case, that only professional skill can discover, or remove, makes a serious impression on their minds, and fills them with frightful apprehensions of the danger of these mysterious difficulties, compelling them, no matter how repugnant to their sentiments of delicacy, to submit themselves to the hands of a physician. This has been the artifice used in many cases, where no difficulty really existed, except that the labor was tedious; and perhaps by the time the doctor was called in, nature was ready to do her work, and then the doctor claimed the honor of doing what nature had done herself, and would have done without his presence; if the female attendants had not previously heard so many awful tales about hair-breadth escapes, mysterious difficulties, &c., which now wrought upon their imagination, and alarmed their fears to such a degree that they fancied that there was safety in no hands except those of the doctor. When he arrives he puts on a knowing look, as if he had discovered the mysterious difficulty—he administers some simple medicine, which he promises will soon remove the difficulty. The disheartened patient begins to pick up courage, nature renewes her effort, and the child is born. In this way many physicians have practiced upon the credulity of women and the fears of their husbands, until they have succeeded, in many places, in creating a belief that a woman was not safe in the hands of any one but a physician, even in cases where no difficulty existed. Such physicians will harp on *one* irregularity of nature perhaps a thousand times; but they carefully conceal the fact that such a case is perhaps only one of a thousand. Another cause that has helped to clothe the process of delivery with undeserved terrors, is the mystery which some practitioners have designedly thrown about the subject, and the exaggerated tales they have told about the difficulties and dangers, they have met, and from

which nothing, but their superior skill and dexterity, could have relieved the unfortunate patient. But to correct these false impressions, and place the affected skill, and dexterity of these trumpeters of their own fame, in the proper light, we will take the trouble to give the reader a condensed view of the proportionate number of natural cases where there was no difficulty, to those where more or less difficulty occurred, taken from the registers of different practitioners, in different countries.

Matternite reports twenty thousand three hundred and fifty-seven cases of delivery, of which twenty thousand one hundred and fifty-three were natural. Now here are only two hundred and four cases out of more than twenty thousand that were unnatural; and you must bear in mind that in this account, all cases, where there were twins, or where the presentation was feet foremost, were called unnatural, though not attended with any unusual difficulty.

Of thirty-seven thousand nine hundred and five cases reported by Lachapelle, only five hundred and forty-one were difficult, all the rest terminated without assistance from art.

Merriman reports eighteen hundred cases, of which only thirty-one were difficult; and Dr. Bland reports eighteen hundred and ninety-seven cases, of which only thirty-seven required any assistance from art.

In Dr. Boer's report of nine thousand five hundred and ninety, only one hundred and two were difficult.

Should the reader have any curiosity to pursue this comparative enumeration of natural and difficult cases of labor, he may consult "VELPEAU'S MIDWIFERY," a late French work of some distinction.

These reported cases show that nature is much more uniform, and safe in her operations, than those physicians are willing to give her credit for, who have designately hung a veil of mystery over the process of parturition, and rung a thousand changes upon the few cases of difficulty and danger, that occasionally do occur. We

are satisfied that the number of tedious and difficult labors may be greatly diminished by observing the directions hereinafter given, and using the simple, safe botanic remedies recommended. In the progress of pregnancy, and during the process of delivery, a greater number of organs are brought into action than in the unimpregnated state. Hence, during this period, the organic machine is more complicated, and consequently more easily, and extensively affected by slight causes than at other times. The observance of proper caution, however, and the use of the proper remedies, will obviate many difficulties and dangers that would otherwise occur.

In our method of arranging the subjects that belong to this division of our book, we have taken the liberty of differing a little from any author we have examined; but we trust the arrangement we have adopted, is calculated to facilitate the study of the subjects connected with this important branch of medical science. We have also purposely omitted every indelicate discussion and description, that we judged could be dispensed with, so as not to render the work defective on any point of practical importance.

CHAPTER I.

DISEASES PECULIAR TO THE UNIMPREGNATED STATE.

PREVIOUS to the period of puberty, the female is scarcely subject to any disease not common to both sexes; but when that period arrives, woman is liable to painful irregularities in her menstrual purgations, which are not only replete with present ills, but also menace future and remote, dangerous consequences. These irregularities must be early, and properly treated or they will involve the general health, ruin the constitution, and bring on a consumption, or some other fatal disease. After puberty almost every stage of female existence is subject to some complaints peculiar to itself, as well as to others common to them all;—these will all be treated of under their proper head.

SECTION I.

IMPERFORATION OF THE HYMEN.

The hymen is a membrane situated in the vagina at a short distance from the labia, and in general it partly closes the entrance into the vagina; and some instances have occurred, in which it entirely closed the vagina, producing at mature age serious, and unless removed, fatal consequences. An imperforation of the hymen is attended with no inconvenience until the monthly purgations take place. If this membrane be imperforate, and the menstrual fluid being regularly secreted, must accumulate both in the vagina and womb, as it can find no out-let through the hymen. In some instances, the

quantity accumulated, has been so great as to subject the unfortunate sufferer to the suspicion of being pregnant. At each return of the menstrual period, considerable pain is experienced by the patient. As these pains greatly resemble those of labor, in cases where the enlargement of the abdomen was considerable, they have been mistaken for them. Dr. McCaul records an instance in which he himself was betrayed into an error of this kind; and it was some time before he discovered his mistake. After these pains continue some time, they cease, and do not recur until the return of another menstrual period.

When the menstrual fluid has been retained in consequence of the imperforate state of the hymen, it assumes a dark, watery appearance, and unless its evacuation be produced by cutting a passage through the hymen sufficient to allow of the health to be sustained, or some other means be employed,

The obtrusion is easily removed by making an artificial opening or cutting through the membrane. This may be done easily, and may be performed by a sharp-pointed instrument, or it may be done by a pointed needle. Carefully insert into the vagina a sharp needle, or something that will rupture the hymen without cutting any of the contiguous parts. Carelessness or fear need be apprehended from an operation not to be attended with much pain, as the hymen does not possess a great sensibility.

SECTION IX.

MENSTRUATION.

Menstruation is that periodical discharge, which takes place from the womb, commonly called menses or courses. The term menses is derived from the latin word *mensus*, which signifies a month, because in healthy wo-

men, who are neither pregnant, nor giving suck, this discharge generally occurs at intervals of a lunar month, or about 28 days:—with some the period of menstruation is a day or two under this time, whilst with others it is a day or two over it.

The menstrual fluid appears to be a regular secretion from the womb; and although it was formerly supposed to be blood, which it resembles in its appearance, it lacks one distinguishing property of that fluid; viz: the power of coagulating. The most accurate investigations of physiologists have been unable to discover, or satisfactorily account for the cause of this evacuation.

The period at which menstruation commences, depends upon the climate, constitution, and mode of life. In warm climates the menses often appear at eight or nine years of age;—in temperate climates, they generally make their appearance from twelve to fourteen; and in cold climates, they do not appear until the eighteenth or twentieth year. There will also be a difference even in the same climate, as to the time of menstruation, which depends upon the constitution, and passions. Those who have a rapid growth of body and development of the organs, with warm passions, will have an earlier discharge of the menses than those who are different in these respects. The period during which the menses continue, until they cease entirely, varies according to the time of their commencement; the time being generally about double that which elapsed previous to their commencement. Thus if menstruation commence about the eighth or ninth year, it will leave off about the twenty-fifth or twenty-sixth; if it commence about the fourteenth or fifteenth, it continues to about forty-five; and when it does not appear before the eighteenth or twentieth year, it continues until between fifty and sixty.

The time required for the menstrual purgation, at each periodical return, is from three to six days. The regular discharge of the menses, at the proper intervals is important to the health of a woman, from the time of their first appearance, until they entirely cease, except du-

ring pregnancy, and during the period of giving suck.

Whenever the menstrual discharge makes its first appearance, it announces puberty, and that maturity of the generative organs which renders them capable of performing the functions for which they were created; and when this discharge ceases or leaves off entirely, it announces the inability of the generative organs to perform their peculiar functions. Both these periods are critical with women; and much depends upon the precautions in avoiding exposure to wet, and cold, or overstraining in lifting, working, &c.

The first appearance of the menstrual discharges, are generally preceded by restlessness, slight fever, headache, heavy dull pain in the small of the back, and bottom of the abdomen, swelled and hardened breasts:—the appetite becomes delicate, the limbs tremble and feel weak, the face becomes pale, and there is a peculiar dark streak or shade under the eyes. When these symptoms occur every possible care should be taken to prevent catching cold; and indeed about the period these discharges are expected, care to avoid exposure to cold should always be taken. About this time of life, girls should not be allowed to get wet, wear damp clothes, sleep in damp beds, walk in grass wet with dew or rain, nor walk barefoot on cold or wet ground. For the medical treatment of any derangement of the menstrual discharge, see under the following heads.

SECTION III.

SUPPRESSED OR OBSTRUCTED MENSES.

When the menses have made their appearance regularly, they are liable to be obstructed by exposure to cold, commonly called "*catching cold.*" The bad effects of taking cold do not always show themselves immediately; but they generally become manifest after the

repeated return of the period at which the menstrual discharge should take place, if the obstruction be not removed. Women, that are otherwise in good health, may not experience any inconvenience until the return of the menses fail for several periods. But such is the sympathy existing between the womb and other parts of the system, that the general health will be affected, and sometimes the most incurable diseases are the consequence of a neglect in timously removing the obstruction. Hysterics, depression of spirits, sickness of the stomach, pains in the head, back, and bowels, coldness of the hands, and feet, flushings of heat over the body, colics, spitting of blood, bleeding at the nose, with a dry, short cough, pains in the abdomen, a hard, quick pulse, a hot skin, and a burning sensation in the palms of the hands and bottoms of the feet, are symptoms frequently met with, when the menstrual discharge has been obstructed long enough to produce some disordered state of the womb. When the last of the above named symptoms occur, they indicate great danger from the consumption, and unless something efficient be done immediately that fatal disease will be confirmed:—negligence, at this critical period, will be likely to be followed by fatal consequences.

TREATMENT.

As soon as you discover that this monthly purgation is obstructed, and have reason to believe that cold, and not pregnancy, is the cause of it, you should take measures to remove the obstruction, which in the early stage is easily done. About the time the menses should flow, drinking a tea of pennyroyal, tansy, or rattle root, will in most cases remove the difficulty. They should in addition to this drink some diaphoretic, or even pepper tea, and bathe the feet just before going to bed, to promote perspiration. In more difficult cases the patient may sit over a steam of cedar tops, or young pine tops, ten or fifteen minutes, drinking some of the above named

teas; and then let the patient get immediately into bed, keeping up the perspiration for some time, and be careful about cooling off suddenly, as there is danger of taking cold. The diaphoretic powders should be used to prevent the danger of taking cold when the patient first leaves the bed, which should not be done with clothes damp with sweat. The bowels should first be relieved with an injection made of pennyroyal or peppermint tea, to which a small portion of rattle root tea may be added; and after the operation of the injection a dose of the butter nut sirup must be administered.

Where this difficulty has been neglected until the general health is impaired, the patient should take alternately the laxative bitter tonic and the diaphoretic powders, five or six times a day. A clyster, composed of a tea of red raspberry or witch hazel, to which should be added a tea-spoonful of the diaphoretic tincture and one of the tincture of rattle root, thrown up the vagina once a day, will be found very serviceable. A few courses of medicine may be employed with great advantage to clear out obstruction, equalize circulation, and throw off from the system all morbid matter. An occasional dose of butter nut sirup to cleanse the bowels is sometimes necessary. About the time the courses should return, the patient should drink the tea of rattle root for two or three days; but whenever they come on, quit the use of the rattle root tea; and if they should happen to flow too profusely, regulate them as directed under the head of *profuse menstruation*.

The above, or some similar course of treatment will generally effect the desired object. The patient should continue the use of medicine until the menstrual discharge becomes regular, and the general health is restored.

SECTION IV.

RETENTION OF THE MENSES.

This disease differs from obstruction of the menses chiefly in this; obstruction of the menses takes place after this periodical discharge had regularly come on; but by ‘*retention*’ of the menses is meant, the retaining or keeping of the menstrual fluid after the period of life has arrived, when this discharge should take place.

When girls have arrived at the age of puberty, the menstrual purgation is essential to their health; and if it does not take place, there will be headache, loss of appetite, weakness of the limbs, a peculiar paleness of the face, with a sinking of the spirits, hysterical affections, and other derangements of the general health. After girls have arrived at the age, when this discharge should appear, nature generally gives an indication of the fact by the following symptoms;—pains in the back, hips, and loins; a sensation of weight, fullness, and heat in the pelvis, sometimes attended with a forcing or bearing down. If no discharge takes place these symptoms sometimes occur periodically, until continued bad health is produced.

TREATMENT.

The means recommended for obstruction of the menses, will in general, be proper in this disease. The patient should take exercise in the open air in fair weather. But she must carefully avoid exposure to night air, avoid walking in the dew, going barefoot in the cold or wet places, or any other means of taking cold.

SECTION V.

PAINFUL MENSTRUATION.

Dr. Dewees says this complaint is often met with in our climate; and is often not only accompanied with great suffering, but it is frequently obstinate to cure. The causes of this painful malady, are supposed to be taking cold during the flow of the menses, or shortly after abortion.

The quantity of the menstrual fluid discharged is generally small, and is accompanied with severe, bearing down pains, similar to those of labor. These pains continue at longer or shorter intervals, until small clots of blood are discharged; and sometimes instead of the blood, a membranous substance is discharged. After this the patient experiences some ease, until a fresh production of one or the other of these substances, is to be expelled, when there is a return of the pains. Women afflicted with this complaint never bear children, until cured.

TREATMENT.

Administer a dose of the butter nut sirup to cleanse the bowels and then let the patient take daily two or three doses of the bitter laxative tonic, and in connection with it, a tea of the star root, or of tansy. An occasional dose of the diaphoretic tea should be taken; and injections similar to these recommended for obstructed menses. Some physicians recommend the tea of the partridge berry for this complaint. Setting over the steam of cedar or young pine tops, and drinking the anodyne drops, and diaphoretic tincture will be useful; or the course of medicine may be used, and repeated as often as the symptoms indicate its propriety.

SECTION VI.

PROFUSE MENSTRUATION.

The menstrual discharge may be too profuse, either from its too frequent recurrence, or from the great quan-

tity discharged, when recurring at the proper periods. Very often there is a discharge of real blood in this disease, which renders it very debilitating.

This complaint may be produced by particular weakness in the uterus or womb, or by general debility of the body; by an attenuated or thin state of the blood; by weak or unnourishing diet; excessive indulgence in sexual intercourse; or by repeated miscarriages.

TREATMENT.

In this complaint cold applications, such as cold water, ice, &c., are the great reliance of some physicians; but the danger and inefficiency attending such a practice, ought to secure its dismission from the walks of medical science. The proper indication to be answered in the treatment of this complaint, is to increase the tone of the system generally, and that of the uterus particularly. For this purpose the astringent tonics, such as beth root, astringent tonic powders, tansy tea, &c., may be used, adding a little cayenne to each dose. A tea of the amaranth or prince's feather is highly recommended by some to check flooding; and the queen of the meadow is useful for weakness of the uterine vessels. Injections of beth root or witch hazel tea, or some astringent tonic article may be used, to check the flow of the blood.

SECTION VII.

CESSATION OF THE MENSES.

Cessation of the menses means the entire stoppage of this discharge, when the female has arrived at that period, when these organs become incapable of performing their peculiar functions. This usually occurs in this country, between the forty-second and forty-seventh year; though, in those of a delicate constitution, it stops before that

period, and in those of a robust constitution, it sometimes continues later. The cessation of the menses is not introduced as a disease; but as it is a very critical and dangerous period of a woman's life, it will be proper to give some directions for the government of the female's conduct about this critical period. The cessation usually takes place gradually. They first begin to diminish in quantity, and then they become more or less irregular, until they return no more. Thousands pass this period without experiencing any inconvenience; whilst others in passing this important revolution in their functions experience the attack of diseases, of such a stubborn character that the remainder of their lives is embittered with constant suffering; and on the other hand some others who had been weakly, and unhealthy previous to this period, afterwards enjoyed a degree of health and vigor to which, they were hitherto strangers.

About this period women should carefully avoid all exposure to cold, damp, night air, &c. Sudden changes of dress, or any thing that produces a sudden transition in the temperature of the body is particularly dangerous. Strict attention should be paid to temperance and exercise, so as to preserve the general health, and promote the free exercise of the other functions of the body.

If any disease ensue, treat it according to the directions heretofore given for such complaint.

CHAPTER II.

DISEASES OF THE PREGNANT STATE.

THE pregnant state, though not a diseased one, renders woman liable to some inconveniences, and to some diseases peculiar to that condition. The complaints commonly attendant on pregnancy, are not of a very dangerous character, yet they are often very troublesome. The system experiences an increased susceptibility of disease in a state of pregnancy, which is probably owing to a more acute sensibility of the nervous system.

The complicated ills, and suffering attendant on this condition, loudly call for the sympathy, and soothing consolations of affection from the husband, to lighten the burden of suffering, and soothe the irritation of feeling peculiar to this state, so far as the endearments of affection, and the kindness of attention can.

SECTION I.

CONCEPTION.

Writers on this subject have suggested various theories, which they offer in explanation of this mysterious phenomenon. All the theories, however, we have yet seen, are complicated, perplexed, and unsatisfactory, and in our judgment, leave the subject still to be justly ranked among the many other inexplicable phenomena of the animal machine; nor have we any thing better to offer on the subject. Conception is known to be the natural result of sexual intercourse, and is the process by which the womb fulfils the object of its creation; viz: the production of another being.

As the most that is to be found in books on this subject, comprises more of conjecture than knowledge, and as it is more calculated to gratify curiosity than to furnish any information of practical importance, we forbear to add any thing further on the subject.

SECTION II.

PREGNANCY.

As soon as the regular, organic formation of the embryo commences, "nature has entered upon her grandest work," and the pregnant state has commenced. The menstrual fluid ceases to flow, a different, and a new order of things arises; and in the mean time, almost every part of the system experiences more or less, the effects of these important changes. New organs are now formed to protect this germ of a new being, to support its growth, and supply its nourishment. These are the placenta, the membranes, and the umbilical cord.

The placenta, (commonly called after-birth,) is generally attached to the upper part of the womb; though it may be to any other part, and in a few instances it has been over the mouth of the womb: in this case, dangerous floodings are apt to take place at the very commencement of labor. The umbilical cord, or navel-string is attached at one end to the placenta, and at the other to the belly of the child. The membranes are a thin, delicate substance, extending from the edges of the placenta, and forming a sac or envelop, enclosing the foetus or child, and a peculiar fluid called the *amnii* or waters.

The placenta prepares, and supplies from the mother that nourishment which is necessary to support the growth of the foetus. And the umbilical cord, which is composed of two veins and an artery nicely twisted together. The blood, which passes through the veins of this cord enters at the navel of the child, and is by the

proper vessels conveyed to the heart; and by the heart it is propelled through the arteries to the various parts of the body to support its growth. After it is returned to the heart by the veins from the different parts of the body, instead of being propelled into the lungs through the pulmonary artery, it is propelled through the artery in the navel cord into the placenta. Hence the placenta may be considered as supplying the office of the stomach in preparing nourishment; and that of the lungs in changing the venous into arterial blood, for the child before its birth. The membranes as above observed envelop the foetus and the waters, until the child has acquired sufficient perfection of organs, and firmness of structure to bear the vicissitudes of another mode of existence, which is generally from forty to forty-two weeks from the stoppage of the menses.

SECTION III.

SIGNS OF PREGNANCY.

Women generally feel much interest in knowing certainly whether they are really in a pregnant state; it may not therefore, be improper to give such symptoms attendant on the incipient stage, that in most cases a woman will have but little difficulty to make a decision, especially after the first pregnancy.

In common, the first symptom is a failure of the periodical return of the menstrual discharge, sickness at the stomach, especially in the morning and sometimes vomiting, loss of appetite and loathing of food, and sometimes a craving of particular kinds of food, which at other times are indifferent, or even disliked, heart-burn, palpitations or flutterings of the heart; and sometimes tooth-ache. The eyes, assuming a languid expression, loose their vivacity, and appear to sink in their sockets; the eye-lids turn dark, and are surrounded with a lead-

en colored circle; the face becomes pale, and the features sharp; the waist grows more slim and lank than usual, continuing so for some time; whilst the neck swells and becomes softer; the breasts enlarge, and if it be the first pregnancy, the rose colored ring around the nipple becomes dark. The rising of the navel so as to become flat and smooth with the belly may be considered almost a certain evidence of pregnancy.

During the period of pregnancy some women become dull, gloomy, and pevish; and others are more lively, witty, pleasant and agreeable than usual. Pregnancy never does exist without some or all of the above named symptoms, yet the most of them may exist without pregnancy: on this account, they are commonly termed equivocal signs. Between the sixteenth and twentieth week, the mother becomes sensible of the motions of the child, which is termed quickening: this is termed an unequivocal sign.

SECTION IV.

NAUSEA AND VOMITING.

Sickness at the stomach, attended with vomiting, is a very common, and distressing attendant of the earlier stages of pregnancy. Many physicians regard it as answering some wholesome intention in the economy of nature, while it is so moderate, and continues so short a time as not to induce considerable debility.

TREATMENT.

Keep the bowels regular by the daily use of injections, or by doses of rhubarb, or the butter nut sirup:—this generally renders the sickness less harassing; yet, as vomiting in this case, arises from the changes produced in the state of the womb, it is generally out of the power of medicine to procure entire relief. An emetic to cleanse the stomach, often relieves the aggravation of

the symptoms; after the operation of the emetic some of the articles in the class of antiemetics may be advantageously used. When sourness of the stomach accompanies these symptoms, the antacids should also be used to correct the acidity. The tincture of lady's slipper has proved to be very valuable in allaying the irritation of the stomach, when used in connection with the diaphoretic tea. If any particular kind of food be craved, it should if possible be procured, as the gratification of the capricious appetite, very generally aids in diminishing the severity of the symptoms.

SECTION V.

SALAVATION OR SPITTING.

Sometimes an almost constant spitting occurs in pregnancy, which is a great annoyance; and in some instances, the discharge of saliva is so excessive as to produce debility. This symptom is generally attended with a sour stomach, a costive state of the bowels, and a nauseous taste in the mouth. The cause of this unpleasant complaint is not satisfactorily known; but is generally attributed to sympathy between the womb and salivary glands.

TREATMENT.

Employ some of the articles in the class of antacids to destroy the acidity of the stomach, and remove the offensive matter by some gentle cathartic: in this case we know of nothing better than magnesia, and from experience have found it a very innocent article. Rinse the mouth frequently with some astringent tonic article, and use some bitter tonic two or three times a day. The patient should resist the desire to discharge the saliva from the mouth as much as possible.

SECTION VI.

CRAMP.

With some, this torturing complaint is an early attendant symptom of pregnancy, often continuing with greater or less severity through the whole period; but in others it does not appear until a much later period. In some, it is mostly troublesome in the legs and thighs; whilst others suffer most severely with it in the womb.

TREATMENT.

Keep the bowels regular either with injections, or with gentle cathartics. Rub the part well with the relaxing ointment, or with bathing drops. Internally, the patient should take frequent doses of the diaphoretic, and nerve powders. But where the treatment proves ineffectual, employ the course of medicine in connection with it, and nine times out of ten, you will be freed from all symptoms. You may omit the emetic, unless the general health of the patient require it. The frequent application of the vapor bath during pregnancy, will be found especially beneficial in relieving many disagreeable symptoms attending pregnancy.

SECTION VII.

PALPITATION OF THE HEART.

Some women are much troubled with a palpitation of the heart during the early stages of pregnancy; others are afflicted with it only in the latter stages, and a few are harassed with this complaint, at intervals, during the whole period of gestation.

TREATMENT.

Repeated doses of the anodyne powders, or nervine powders, or the tincture of these powders, employed as

the urgency of the symptoms require, has been found useful in this complaint. Asafœtida, used either in tincture or pills has generally a good effect in this complaint. The patient should not neglect to keep the bowels regular; and in addition to the above, the occasional application of the vapor bath has a salutary effect in equalizing the circulation.

SECTION VIII.

PAIN IN THE HEAD AND DROWSINESS.

Headache, attended with drowsiness, and an unpleasant sensation of fullness of the vessels with pains in other parts of the system, very frequently occur during pregnancy.

TREATMENT.

Relieve the bowels first by injections, and afterwards keep them regular by the occasional use of rhubarb, which is a very gentle cathartic, and when used in small portions operates as a tonic. Next remove the unpleasant sense of fullness by applications of the vapor bath, which is a better way of doing it than blood-letting. Bathing the head and temples with bathing drops, or something of the kind, is generally useful.

SECTION IX.

HEARTBURN.

Very few women escape this distressing complaint during pregnancy. At times it is one of the first symptoms she experiences but it commonly does not occur, until an advanced period of gestation.

TREATMENT.

The articles found in the class of antacids, will generally be useful in relieving this distressing symptom; but perhaps none of them will be found superior to magnesia combined with a very small portion of rhubarb. When this complaint occurs in the latter stages of pregnancy it is generally very obstinate to remove; but may be mitigated by the daily use of magnesia. Sometimes an emetic is necessary; in that case, we would recommend Chamber's emetic; (see Index for this article;) and after the operation of the emetic use the columbo root bitters.

SECTION X.

PAINS IN THE OS PUBIS.

Some females in advanced stages of pregnancy, experience severe pains in the os pubis, or front bones of pelvis. These pains are produced by the continual pressure of the womb upon the os pubis, consequently the pains usually increase as the period of gestation advances. Medical aid can do but little in removing this difficulty, while the cause is still unremoved; but when the pains become very excruciating, something ought to be done to alleviate the pressure. This may be done by the application of a bandage around the lower part of the abdomen, and over the shoulders, so as to prevent the pressure upon the os pubis, or front bones. No difficulty will be experienced from wearing the bandage, if it be of the proper width, and shape, so as to give equal support to each part. Let the patient apply the bandage when lying down, and this will make it about the proper length to prevent the pressure upon the bones of the pelvis.

SECTION XI.

COSTIVENESS AND PILES.

Costiveness usually accompanies the first as well as the latter stages of pregnancy. This complaint, during the period of gestation, is produced principally, if not wholly by the pressure of the womb upon the rectum. When this disease is allowed to continue long, it not only aggravates the symptoms of those diseases, which annoy the health during the period of gestation, but is the cause of some of them. Sometimes the piles of a very troublesome and painful character proceed from costiveness.

As we have given the treatment of these complaints in the foregoing part of this work, we refer the reader to that part of the work.

SECTION XII.

RETENTION OF THE URINE.

We have already treated of the suppression of the urine, in the former part of this work, but in this case the difficulty is produced by the pressure of the womb upon the neck of the bladder or the urethra. Immediate measures should be taken to remove the difficulty, otherwise the consequence will be dangerous if not fatal.

The medicinal treatment will be the same as that given for suppression of urine, to which the reader is referred. It generally becomes necessary to employ a catheter to evacuate the water. The catheter in common use is a small, flexible tube of gum elastic,— quite a simple instrument, and the method of using it is equally simple. The bladder containing the urine is situated immediately behind the os pubis. The urinary canal is situated under the arch of the pubis, and is so short, and so little curved, that a strait instrument is preferred. The

patient should be placed on her back, the end of the catheter, being first well greased with lard or some soft oil, should be inserted in the entrance of the urinary passage, and then gently pushed backwards and upwards, in the direction it finds the least resistance. If the patient be not too sick, after the instrument is started, no person can manage it better than she can. There is no need of a physician to perform an operation so simple, as drawing off the urine by a catheter.

SECTION XIII.

WANT OF SLEEP.

Many women, towards the latter stages of pregnancy, become restless, uneasy, and are much disturbed in their sleep. This difficulty seems to originate from an irritation of the nervous system, and from involuntary, spasmodic contractions of the muscles.

TREATMENT.

Nothing perhaps can be used, that seems to have a more salutary effect upon this condition of the body, than repeated applications of the vapor bath, using internally at the same time, the diaphoretic tea, and a tea made of equal portions of lady's slipper and the partridge berry. The anodyne powders, or drops may also be used with advantage.

SECTION XIV.

PAINS IN THE RIGHT SIDE.

Towards the latter period of gestation, some women are attacked with a deep seated, dull pain in the right side, immediately over the region of the liver. The

cause is supposed by Dr. Dewees to be the pressure of the uterus upon the liver; and as it enlarges in the progress of gestation, the pressure becomes greater, and the pain more severe.

From the very nature of the cause, but little relief can rationally be expected from medicine. Laying on the left side, and bathing the right side with pepper and vinegar or with bathing drops, affords some relief. Applying a hot rock or brick at the side on going to bed, causes the substance applied in bathing, to penetrate the better, and remove local obstruction in the part.

SECTION XV.

ABORTION.

During any period of gestation after the first month, through disease, or accidental injury, woman is liable to miscarry; but abortion most frequently occurs between the tenth and twentieth week. After one miscarriage, a woman is much more liable to abortion; and when a habit of miscarrying is formed there is difficulty in preventing it. Most causes of abortion can be guarded against, such as violent fits of passion, great uneasiness of mind, strong purges, excessive venery, external injuries, as falls, blows, bruises, &c.

Generally abortion is preceded by softness or flaccidity of the breasts; pains in the back, loins and lower part of the belly; shiverings, palpitations of the heart; a falling or shrinking of the belly; pains in the inside of the thighs, &c. When these symptoms, or the greater part of them occur in a pregnant condition, and especially if attended with flooding, a miscarriage may be looked for, unless proper means be employed forthwith for its prevention.

TREATMENT.

As soon as the above symptoms make their appearance, let the patient go to bed and keep herself as quiet

as possible. She should drink freely of the diaphoretic teas, made strong with cayenne, and take repeated doses of the anodyne powders or drops, and of the nervine tincture. Take immediate measures to check the flooding according to the directions given under that head. Persevere in this course, making free use of astringent tonics, and cayenne, with an injection or two, made of the amaranth, thrown up the vagina; and in case this article cannot be had, any astringent tonic may be substituted.

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CHAPTER III.

OF LABOR, DELIVERY, &c.

WE now approach a subject of deep and thrilling interest—one that awakes the deepest, and most latent sympathies in the human breast, calling into exercise the prompt exertions of skill in the accoucheur, and the readiest, kindest acts of friendship and affection in the attendants:—it is the last and most critical process of the organs of generation in the production of the species. It is an operation purely natural, though it seldom takes place without a marked train of symptoms, some of which are local, being chiefly confined to the organs immediately concerned; and others are general affecting the whole body. For the sake of perspicuity we shall divide this chapter also into sections, considering each subject in a distinct section.

SECTION I.

SYMPTOMS OF LABOR.

The painful hour of travail is preceded by various symptoms that indicate its approach; and is accompanied by others that mark its progress. And although these symptoms are marked by a considerable difference in different women, and even in the same women at different times; yet so much similarity obtains, that they are not very often mistaken.

Usually the first satisfactory indication of the near approach of labor is the shrinking of the waist, which occurs sometimes a day or two before labor actually commences, and at others, only a few hours before that period. This symptom is either preceded, accompa-

ed, or followed by shiverings or tremblings. At times this symptom is so violent as to produce alarm, though no bad consequence has ever resulted from it. This same shivering sensation frequently occurs immediately after delivery; but seems to be attended with no bad consequence. Another very common symptom of approaching labor, is the secretion, and discharge of mucus from the vagina; though at times, the quantity is so small as to be scarcely perceptible, and at other times, it does not appear until labor commences. As this discharge appears to depend upon the relaxation of the soft parts through which the child has to pass; hence the greater the relaxation, the greater is the quantity discharged; and the easier will be the birth. About this time there is a disposition to void urine frequently, which should always be gratified, as it is important to keep the bladder as empty as possible; and if there be any difficulty in voiding it, the water should be drawn off by a catheter. The bowels should be emptied by injections—as you value ease do not neglect this.

The next symptom we shall notice is the pains which precede active labor; these commence in various ways, and in various parts; but most commonly they commence in the back, or bowels, sometimes extending forward around or through the abdomen, and down the thighs. At other times they extend upward to the stomach, and even to the head. These pains, in whatever part they occur, are periodical; and the length of time that intervenes between them is extremely various; but it grows shorter as actual labor advances, increasing in severity as they do in frequency, until actual labor takes place.

SECTION II. NATURAL LABOR.

Different writers have divided labor into a variety of classes from three to seven; but as we deem these distinctions unnecessary, we shall employ only two, which

we distinguish as *natural* and *preternatural* labor. Natural labor is that in which the presentation is natural, in which nature does all that is necessary without the interference of art. This section then, will include simply a description of the progress of labor, where no uncommon difficulty occurs, which is supposed to embrace at least ninety-nine cases in a hundred, if nature be left free to act for herself, without being deranged by the officiousness of art.

In a treatise on this subject, there are three distinct periods that demand our attention. 1st. The period required for the dilation of the mouth of the womb sufficient to admit the passage of the fœtus. 2nd. The period in which the complete expulsion of the child from the womb is accomplished. 3d. The period required for the expulsion of the placenta or after-birth.

The process of labor is conducted by the natural powers of the system; it is the effort of nature to relieve herself of her burden, being her last toil in this "her grandest work—the production of a new being." The organs concerned in the process of generation patiently bear, protect, and nourish the fœtus until it has attained that maturity of age, and firmness of organs, that will enable it to bear the changes it must undergo in commencing a new mode of existence. This work nature generally performs with an accuracy that never deviates, and a precision that never errs, unless the organs have been so oppressed or injured by accident or disease, as to render them incapable of the regular discharge of their functions, in which case nature sometimes makes a premature effort to relieve herself of the fœtus, which her injured organs are no longer capable of supporting and fostering. This produces an abortion of which we have already spoken, in the preceding chapter.

The commencement of actual labor is marked by pains in the back, and coliky sensations in the bowels. These pains are periodical, remaining but a short time, and after a short interval returning again. When the pains are present, you will discover by applying the hand to

the abdomen, that the womb becomes harder and rounder, and sinks lower in the pelvis. At each return of an effective pain, the mouth of the womb will open a little, and its edges grow thinner; but in the absence of the pain, it again becomes thick, soft and round. About this stage of labor the patient is apt to be greatly distressed with gloomy forebodings, dejection of spirits, loss of fortitude, sadness, and thoughts of death. These sensations appear to arise from a peculiar sensitiveness of the nervous system. This is the moment when woman needs every comfort and encouragement that can be given; and although human aid is of little avail, yet every rational means should be employed to bear up the spirits, inspire courage, and prevent entire despondency.

As the pains increase in strength, they continue longer, and return more frequent:—the womb gradually becomes more and more dilated, and the membranes enclosing the waters are protruded into the vagina; but as the pain goes off, the bag of waters recede. By this time the patient often becomes cross, and impatient of control; and is dissatisfied with every body about her, frequently demanding help. Most accouchers to pacify the patient get her upon the stool to make examination, and pretend to offer assistance. This is the time when much injury has been done. Every examination more or less irritates the tender parts, and produces some degree of inflammation, which by drying up the juices that lubricate the parts, retards the progress of the labor. Such examinations often burst the membranes that contain the waters, and when done at an early stage of labor, seldom fails to render it tedious.

But as the labor progresses the mouth of the womb becomes finally so dilated, that it can not be distinguished from the vagina; and this, according to most writers, terminates the first stage of labor. But there is, however, no intermission here—no abatement of the pains. They still go on increasing in severity and duration, with shorter intervals between them, though that inter-

val is one of more ease and quiet than it was in the first stage. Her courage now returns, and her sadness and dejection are dissipated; and intent only on the accomplishment of her labor, she bears her misery with a patience and fortitude to which she was a short time before an entire stranger. When the head of the child settles in the pelvis, the patient experiences a sensation, that impels her to assist her pains by a bearing down exertion, and she appears almost compelled to do so in spite of herself. Some writers strongly urge the necessity of advising the patient to refrain from this; but she appears to do this by instinct and not reason, and therefore she might as well be advised not to get hungry or sleepy. If it be a fact that this effort is induced by a sensation created in the parts concerned, over which she can exercise no control, we would reasonably infer that it was designed for a beneficial purpose. Surely the wise, and benevolent Creator, would not implant in woman, a sensation, that would instinctively impel her to do that which would be a serious injury in this critical moment! This instinctive effort to assist nature is found among the savages of the forest, as well as among the civilized nations: it is found among animals, and in short it is found among all creatures that are viviparous. It is therefore, useless, if not injurious, to advise women in the last stages of labor, not to do that which nature requires, and instinct compels them to do.

Each pain is ushered in by a general shivering sensation, and the woman now seizes with her hands any thing that comes in her reach, and places her feet against a chair, the bed-stead, or any thing that will bear pressure—she draws a long breath, and having all the fibers of the system prepared, she contracts the muscles of the abdomen with all her powers, whilst the diaphragm, and every muscle of the body conjointly act with the same energy. The neck and face swell, often becoming purple or livid;—the jugular veins are enlarged, and the arteries throb violently; the eyes sparkle, and appear ready to burst from their sockets;—the pain ceases, and

a short quiet ensues. Soon however, another pain returns, and is attended with the same symptoms. At length another painful effort more severe than any of the former, and for which, nature seems to have rallied all her powers, brings the head almost to the point of passing the external orifice; but at this moment of thrilling anxiety, when nature has almost overcome the last difficulty, and just ready to attain the object of so many exertions, when but a little more force was necessary to complete the labor,—in her last effort she seems to fail;—but once more she rallies, having paused to collect her remaining energies, and with another effort, in which every muscle performed its part, the head of the child is forced into the world—after a short pause, another pain completes the birth. The sudden and great relief now experienced, awakes in the hearts of many women, an overwhelming sense of gratitude, which is poured forth in passionate, ejaculatory strains of thankfulness to Him who has thus far sustained them through the trying scene. The new born child cries, and all the sufferings, which the mother so courageously endured for its sake are now forgotten in the joy she feels at its safe deliverance, and in the affectionate interest she feels for its welfare. This sudden transition from extreme suffering and anxiety, to the height of joy, and the manifestation of so much tenderness of affection in the person of a beloved wife, deeply affects the feeling husband, and greatly endears her to him, entwining an additional coil of affection around his heart.

But we must drop this digression, for hurried on by the impulse of feeling, we had nearly forgotten that we had yet to describe the expulsion of the placenta or afterbirth.

After the birth of the child, there is generally a remission of pain for sometime, varying from a few minutes to a few hours; though in most cases it is only a few minutes, until the pains return for the expusion of the after-birth, which completes the process of delivery. No forcing means should be used to promote the discharge of the placenta, as nature will in a little time do her own work.

SECTION III.

PRETERNATURAL LABOR.

Preternaatural or difficult labors, may arise from a deformity of the pelvis, from an unusual or unnatural presentation, &c. Presuming that the reader is acquainted with the general principles, of the healing art as laid down in this work, it will be unnecessary to point out what course of medical treatment must be pursued in any case of difficult labor, except where it arises from a deformed pelvis or from wrong presentations. The difficulties arising from a deformed pelvis are so rare, that several eminent physicians have asserted that they have never met with a case of the kind in the United States; and aver that nature is always sufficient to accomplish the labor, without the aid of steel although the labor may be tedious.

Dr. Gooch says that preternatural presentations are those of the feet, breech, and arm. Other writers add those of the knees and shoulder; but these are only modifications of the arm and feet presentations. Those, who know how to manage the three first deviations from the natural presentation, can readily manage any modifications of these presentations.

As soon as the membranes containing the waters, are ruptured, and the waters discharged, the midwife will have but little difficulty in ascertaining what part presents; for every part that can present, has something to distinguish it from any other part. If the feet present, you should endeavor to get both of them; and the labor may be suffered to progress in the natural way. In order for the head to pass the upper strait of the pelvis, the child should be turned so that the chin would be to the right or left side of the mother; and then any skillful midwife will find no difficulty in completing the delivery. When the breech presents, it is in general, safest not to attempt to turn the child; for the efforts of nature will in general be sufficient for its expulsion; though the labor is usually tedious.

When the shoulder or arm presents, a delivery in that position is impracticable, because the child lies across the pelvis. And if either of these presentations occur, it will be necessary to turn the child. The proper time to attempt to turn it, will be immediately after the waters are discharged, and the mouth of the womb well opened. To perform this operation with safety both to the mother and the child, will require both skill and caution; but with the aid of the directions we will give, any skillful midwife can do it with as much safety, as nine doctors out of ten could.

First gently try to push back the part that presents and keep it so, and four times out five, if properly done, the pains will force the head into the pelvis, which at once brings the presentation to a natural one. But should this attempt fail, endeavor to reach the feet and bring them down. The midwife should first ascertain which hand she should use to reach the feet most readily, and bring them down in the safest manner. The position of the child's hand will enable the midwife to determine, which hand to use. If the palm of its hand is towards the belly of the mother, then use the right hand, which must, after being properly smeared with oil, be passed up the front part of the womb; but if the palm of the child's hand is towards the mother's back, then use the left hand, which must be passed up the back part of the womb. Use great precaution in introducing your hand, passing up in the most gentle and gradual manner; and when a pain comes on the operation must be stopped till another interval of ease. Having reached the feet bring them both down at once. The feet should also be brought down by the child's face; for if brought down by the child's back, it will endanger the life of the child and mother both. If the woman is much exhausted and feeble the delivery must be aided and hastened by the midwife. Some authors recommend the immediate extraction of the child by force; but we think a better course will be to wait on the operations of nature, unless she is entirely exhausted.

SECTION IV.

TWINS.

Hitherto labor has been treated of only in cases where nature presented but one child; but it sometimes happens that two or more are presented at a birth. In general it is not easy to ascertain with entire certainty whether there be more than one, until the birth of the first. Twins are always smaller than single children; and on this account their birth is usually more easy and rapid than that of a single child. When the birth of the first has been comparatively easy and rapid, this generally awakes suspicion that there is another; but the fact is easily ascertained after one is born, whether another is still there. In cases of twins, the second child is always born in a position directly contrary to the first; so when the presentation of the first is head foremost, the second may be expected feet or breech foremost.

Sometimes after the birth of the first child, the pains cease for some hours, or even a day or two; but most commonly they are soon renewed, and the labor progresses as if it were a single birth. If the pains do not return for the expulsion of the second child in the course of an hour, you may give the patient a tea of red raspberry leaves; or witch hazel leaves, made pretty warm with cayenne. Rubbing the abdomen with the hand will also stimulate the womb to contract, and bring a return of the pains.

When there are twins the navel cord of the first should be tied in two places, as the two after-births may be so intimately connected that a dangerous flooding may take place from the cord of the first. The after-births, if there be two, will both be expelled at once after the birth of the last child.

SECTION V.

MANAGEMENT OF WOMEN DURING LABOR.

Immediately on being called to deliver a woman, your first business should be to ascertain whether actual labor has commenced. For this purpose administer a few doses of anodyne powders, or of a tea of red raspberry leaves, or witch hazel leaves, made strong with cayenne:—these articles a midwife should always have with her, as they are both valuable and safe. If the the pains be what are called false pains this will quiet them; and if not, the labor will progress. You may further satisfy yourself, by carefully feeling the mouth of the womb at the time a pain is on, and if the labor be genuine, the mouth will dilate a little, and the edges will grow thinner. It frequently happens at the commencement of labor, that women are much racked with wild, scattering misery through the system, which causes much suffering, and does little good towards effecting delivery. When this is the case, it is an evidence that the woman has taken cold, & that the system is laboring under its effects. One of the best things ever tried, so far as we know, is to give the patient plenty of the diaphoretic powders, and place her ten or fifteen minutes over the vapor bath:—this will remove the misery, and give the patient quiet for sometime. If the proper time has come, after the woman has rested sometime, the labor will commence regularly and operate efficiently; & the woman will have a much easier and shorter time than she will have, if the steaming be neglected. The patient should occasionally take a dose of the diaphoretic powders during the whole time she is in the hands of the midwife to obviate the danger of taking cold.

Another subject that demands your early attention, is the state of the bowels and bladder:—it is very important that both should be evacuated. If the bowels be costive, give an injection immediately, and evacuate their contents thoroughly; and if the urine be stopped

by the pressure of the uterus on the neck of the bladder, draw off the water by a catheter: every midwife should carry with her these very essential instruments; namely, a syringe, and a catheter. You must not neglect these evacuations, as you value the ease of your patient, and the safety of her delivery.

Having attended to the above directions, you must patiently wait until the mouth of the womb is opened. This process is sometimes tedious; and it is a very important part of a midwife's qualification to keep from being too officious, during this part of labor; for handling a woman, and making frequent examinations during the dilation of the mouth of the womb, never can do any good, and may do much harm. We are apprised that it is very difficult for the midwife to satisfy either the patient or her friends, that no aid is needed, and that none can be rendered during this period; for the pains during the opening of the mouth of the womb are very distressing, being what are commonly called by women, grinding or cutting pains; and it is during this period that women suffer such great anxiety, depression of spirits, impatience, &c. Both the woman and her friends, think if she had help, that delivery would soon be effected; and if the midwife does not take the patient in hands, all are ready to exclaim against her. Unfortunately, too few have fortitude and sense enough to withstand the entreaties, and repreaches cast at this period of labor. Let the midwife impress upon the mind of the patient that all officiousness previous to the dilation of the mouth of the womb, will instead of aiding her, only retard the event she so impatiently expects. Says Dr. Bird, "During this stage of labor no skill, or art of the midwife; no exertion of the woman can in the least contribute to lessen the severity of the pains or shorten their duration. They are intended by nature to accomplish this necessary and important object,—the complete dilation of the mouth of the womb." Again the same distinguished author says, "What terms shall I use to condemn, as it deserves, the abominable practice of boring,

scooping, and stretching the soft parts of the mother, under the preposterous idea of making room for the passage of the child. It is impossible to censure this [wicked] conduct, this dangerous practice too severely: —it is always wrong; and must unavoidably do great mischief. It will render an easy labor difficult, and painful—one which would have been short, tedious—and one, which, if left to nature, would terminate happily, extremely dangerous. I may convince the judgment of a sensible midwife [of the truth of these remarks] yet she is not permitted to exercise her judgment, unless she have firmness and self possession to resist the solicitations, importunities, and threats of the patient and her mistaken friends. She will not only be importuned on occasions of a little delay, but she will often be reproached with negligence in permitting her to suffer without assistance, and will even be threatened with application to others, and the loss of her reputation." It requires no small share of philosophy for a woman to hear all this; and she should, therefore, be fortified with all the calmness, and firmness, that a correct knowledge of the case can furnish:—we write not this merely for midwives, but for the whole female community—for the world.

When the mouth of the womb is so dilated that you can not distinguish between it and the vagina, both forming one continuous sack, the contraction of the womb at each returning pain, propels the child slowly down the pelvis. The gloomy forebodings, and dejection of spirits that prevailed a short time before, now give place to very different feelings; and the patient acquires new courage and energy. The patient may now be placed on the knees of some of the attendants, or she may be laid in bed on her left side and delivered. We presume it is unnecessary to detail the minutia of delivery, as that would only be telling what every midwife is well acquainted with, without the aid of books. We shall therefore, only notice such things as we deem necessary. As soon as the head is expelled from the vagina, the

midwife should examine with her finger about the neck of the child for the navel cord. If she finds it, she must gently draw it over from the back of the head to the face; and then wait for another pain to complete the expulsion of the child.

The first important thing, after the child is born, is to establish its breathing. The child should be received upon a warm cloth to defend it from the air, especially if the weather be cold. Generally the child cries immediately after it is brought into the world, but if it does not, let its mouth be cleared of whatever may be in it to obstruct the breathing. Its body may be wet with spirits or cold water being suddenly dashed on it. In most cases, this will have the desired effect. But if this means fail, strip the navel cord between the thumb and finger repeatedly from the mother to the child. Should this also fail, as soon as the after-birth is expelled, place it on hot embers, and strip the navel-cord as before directed. This is said to be the most effectual method of treating still-born children ever yet tried. As soon as the child has commenced breathing, the navel cord will measurably cease its pulsation. You are then to tie a cord around the navel string two or three inches from the child; and then the navel string is to be cut off about a half inch from the tie. Sometimes the child is separated before the placenta is expelled; but in that case there must be two ties, and the navel cord cut between them.

In no case must the navel string be cut before it quits pulsation, nor before the breathing of the child is established.

The next thing that demands attention, is the expulsion of the after-birth. This commonly takes place in from five to thirty minutes after the birth of the child; though instances have occurred in which it remained two or three hours, and even as many days without producing any bad effect. But as both the patient and midwife are anxious to have the process completed, it may not be amiss to give some directions to aid its expulsion. We have heretofore shown that the placenta is attached

to some part of the womb during pregnancy, in order to establish a communication between the mother and the child. Before it can be expelled therefore, it must be detached from the womb; and this is mostly done by the contraction of the womb; for when the womb contracts it lessens the surface of the part to which the placenta is attached, and as the placenta does not contract, the womb tears itself loose from the placenta; and the contraction of the womb closes the mouths of the blood vessels, and thus presents the flooding from being dangerous. Whenever the womb contracts after the birth of the child, the after-birth may generally be removed by gently drawing the navel cord, as in that case the placenta is detached, and is probably only lying in the vagina. The midwife can readily ascertain whether the womb has contracted by applying her hand to the abdomen. If the abdomen feel uniformly soft, the womb has not contracted; but if a hard ball be felt just above the pelvis, the womb has contracted. If the womb be not contracted no force must be employed to detach the placenta, lest a dangerous flooding be produced. Rubbing the belly with the hand will make the womb contract; in most cases however, this will not be necessary, as nature when waited on a little will do its own work in the safest manner.

SECTION VI.

MEDICAL TREATMENT DURING LABOR.

It will perhaps be necessary that we add something on this subject to what was said in the preceding section, as difficult cases require more medical treatment than is there prescribed.

In all common cases the directions given in the preceding section will be sufficient; but when some untoward circumstances occur other, and more active measures will be necessary.

Should the parts concerned be slow in dilating, or if they become dry, swelled, and inflamed, let the patient sit over a medicated vapor, made of the tea of bitter-herbs, long enough to relax the parts, and produce a free perspiration, at the same time, drinking copiously of the diaphoretic powders. Should convulsions or fits occur, give repeated doses of the nervine, and antispasmodic tinctures until the spasms are removed. It will always be necessary to use the vapor bath in connection with the tinctures to relieve the spasms.

The blue cohosh, and the partridge berry, have each been highly recommended by distinguished physicians as valuable to regulate the process of labor, relieving those pains which are untimely; and when actual labor has come on, if the pains are lingering, or if severe and inefficient, these articles, particularly the first one is said to moderate the severity, and at the same time, render them more efficient. The cohosh is likewise said to be most excellent to relieve cramps and spasms; and is recommended by Peter Smith as one of the safest and most efficient articles, that pregnant women can use, securing a more speedy recovery afterwards than other articles do which are in common use.

SECTION VII.

TREATMENT OF THE MOTHER AFTER DELIVERY.

As soon as practicable after delivery, put the patient in a clean dry bed, and let her enjoy as much quiet as possible. If the flooding be considerable, treat it as directed under that head, in the next chapter. You must frequently change the clothes under the patient, and keep her dry as possible.

A broad bandage of cloth, or flannel which is best, should be applied moderately tight around the abdomen of the woman, so as pleasantly to support the parts.

This bandage ought to be worn three or four weeks; and this will prevent her from having a large, ill shaped abdomen. About the next day after being put to bed, administer a dose of butter nut syrup or some gentle cathartic to give motion to the bowels; for you must by no means suffer them to become costive, if you wish to escape the child-bed fever, and the whole train of afflictive symptoms, incident thereto. You should every day, for four or five days, wash the birth-place with warm milk and water, occasionally injecting some of it into the vagina to cleanse it. By attending to this you will not only promote the speedy recovery of the patient, and secure her health after recovery, but you may prevent some disease, that might otherwise ensue.

Be very careful not to let your patient take cold. When ever it becomes necessary to change the clothing; those put on, or about the patient should be thoroughly dried and well aired. A good drink of diaphoretic tea at each time will have a tendency to obviate any danger of taking cold. Where any disease occurs you will find its treatment in the next chapter under its proper head.

CHAPTER IV.

DISEASES CONSEQUENT ON DELIVERY.

WITH great truth may it be said, that woman realizes the bitter infliction of that penalty incurred by the mother of us all for the violation of the paradisaical law, which said, "In sorrow shalt thou bring forth." She is not only subject to the diseases common to the human family, but even the natural operation of some of the functions peculiar to her sex, are attended with great pain, and followed with increased liabilities to the attacks of disease. In the present chapter we propose treating under its proper head, each disease that is likely to follow delivery, or at least as many of them as seem to require special treatment.

SECTION I.

FLOODING.

Flooding of a very dangerous character sometimes occurs after delivery, requiring the most active measures to stop it.

The common cause of this flooding, is the want of tone and action in the womb to enable it to contract, and thus close the mouths of the blood vessels, that are opened by the expulsion of the after-birth. The use of the astringent tonics are strongly indicated, and repeated trials of their efficacy, prove that attention to this indication is the proper mode of treatment. Without waiting to detail unnecessary minutia, we unhesitatingly recommend the use of astringent tonics combined with a

small portion of cayenne. Of this class of medicines you will find many valuable articles in *materia medica*, and may be able on any occasion to find some that will answer. Sometimes an injection of birth root, or witch hazel tea, thrown up the vagina is necessary when the flooding is very profuse; and if this will not answer something more astringent should be employed in the same way. Rubbing the hand over the abdomen is highly recommended by Dewees and some other distinguished physicians, as promoting the contraction of the womb. The rubbing is to be done from the pubes towards the stomach, and is to be continued sometime after the womb contracts to prevent its relaxing again.

SECTION II.

AFTER PAINS.

These are pains occasioned by the contraction of the womb, in its exertions to expel clots of blood and secretions which are contained in the womb after the birth.

When these pains are not very severe, and produce but little inconvenience, it will be unnecessary to use any means to remove them. But when they become very severe, you may give the patient repeated doses of the anodyne powders, and suderific powders, placing at the same time boiled corn at the abdomen of the patient, which must be removed when cool, and its place supplied by more. But the surest means of removing these pains is by injections in the womb, composed of a tea of catnip or tag alder bark, to which may be added a tea-spoonful of the diaphoretic tincture. The tea of the tag alder bark taken internally often answers the purpose of the anodyne powders.

SECTION III.

LOCHIAL DISCHARGE

The discharges, which take place from the womb and birth-place, for several days after delivery, are termed lochia, which in plain English, means cleanings.

When this discharge is debilitating, being so profuse as to border on a flooding, drink freely of the diaphoretic powders, and also take four or five doses daily of the astringent tonic powders. Injections of the same must be thrown up the vagina; and an occasional injection will perhaps be necessary to prevent constiveness. Sometimes these discharges become suppressed, and produce great pain. This difficulty may generally be removed by giving the patient some warming or stimulant teas, and injecting a little warm milk and water up the vagina; and at the same time, apply a warm fomentation to the abdomen.

SECTION IV.

CHILD BED FEVER.

This disease is sometimes technically termed *puerperal fever*; and it may be regarded as one of the most fatal diseases to which lying-in women are subject. Dr. Hunter, and some other distinguished physicians, of the old school reckon that three fourths of all who take it die; and that one half of those who die in child bed, are cut off by this disease.

Child-bed fever usually attacks in a few days after delivery, when it does occur; and its approach is indicated by a pain in the bowels, with such a tenderness of the abdomen, that the least pressure upon it is extremely painful, often rendering the patient unable to bear the weight of the lightest bed clothes, or to turn herself in bed, or even to be turned. As the disease advances, the abdomen swells, though the pains often

grows less severe. Shivering is a very common symptom, and is succeeded by a quick, and usually full pulse, hot skin, short, anxious breathing, pain in the head, sharpness of features; a peculiar wildness of the eyes, prostration of the living power, suppression of the lochia, drying up of the milk, and softness of the breasts. There is usually diarrhea, and the stools are very foetid.

TREATMENT.

We first remark that taking care to avoid cold, and using the diaphoretic powders daily will generally prevent, this disease which has hitherto worn so many terrors, and baffled so much skill. This kind of fever, however, has been successfully combatted with the botanic remedies, in its most aggravated forms, and nine cases out of ten it has been compelled to yield to the power of the Thomsonian remedies.

Take immediate measures to raise a free perspiration, by administering repeated doses of the diaphoretic powders, and applying warm fomentations to the abdomen, and hot rocks to the feet. Cleanse the stomach with emetics, and the bowels with injections. Bathing the abdomen with the diaphoretic tincture, and applying warm fomentations to it alternately has a good effect in relieving the soreness. This course attentively pursued, will rarely fail to subdue the fever immediately, if it be taken in hand in proper time.

SECTION V.

INFLAMED OR SWELLED BREAST.

Inflamed and sore breasts are caused by cold settling in them; and when this takes place, it is a source of much pain, and inconvenience to the patient.

This difficulty may readily be removed by administering repeated doses of the diaphoretic powders, and

using other means to promote perspiration. At the same time, bathe the breast with the discutient ointment, page, 366, or apply the sumach poultice to it, page 370. An ointment made by stewing the inner bark of the root of the black sumach in lard is perhaps not inferior to either of the above applications. The writer has repeatedly witnessed its good effect; and in no instance has he known it to fail. If the general health of the patient be bad, in addition to the above employ a course of medicine.

SECTION VI.

MILK FEVER.

In a few days after delivery, the breasts become distended with milk, whilst the discharge from the womb is diminished. This change is often attended with feverish symptoms, such as headache, thirst, hot skin, quick pulse, &c.; and is generally termed milk fever.

Bathe the breasts with either of the ointments recommended in the foregoing section, keeping them covered with a warm flannel cloth. At the same time, let the patient drink freely of the diaphoretic powders, and employ other means to promote perspiration. This in general removes all bad symptoms; but if it should not, in addition to the above, you may employ a course of medicine.

SECTION VII.

SWELLED LEG.

This complaint may attack at any time, from the second day to the fourth week after delivery. Among the common people it is usually called the *white leg* from the paleness of its color; but in the technical language of the doctors, it is termed *phlegmasia dolens*.

The symptoms, which precede this complaint are, a general uneasy sensation all over the system, dejection of spirits, slight pain about the womb accompanied with peculiarly offensive discharges from it. These symptoms, however seldom excite much attention, until the patient is seized with a pain on the inside of the leg, commonly about the thick part below the knee, but it soon extends from the heel to the groin. In a short time, the limb begins to swell, and the skin turns of a pale, glossy color; whilst the limb becomes so tender, that the slightest touch, or motion creates exquisite pain. The countenance is expressive of great anguish and dejection; the pulse is quick; the skin hot; the tongue white, and the urine muddy.

This complaint is supposed to proceed from some irritating matter in the womb.

TREATMENT.

When symptoms of this complaint make their appearance, injections of milk and water, about blood warm, should be forcibly thrown up the vagina for the purpose of cleansing the womb of the irritating matter that may be in it. Next bathe the leg well with bathing drops, or with a strong decoction of pepper and vinegar. After this carry the patient through a course of medicine; and repeat the bath, applying it with much friction. Steaming the affected leg over bitter herbs, has a very salutary effect upon it. The course of medicine may be repeated, if necessary. Keep the bowels regular by the use of the bitter laxative tonic, and drink freely of the diaphoretic powders. Between the intervals of bathing and steaming the leg it should be kept well wrapped with flannel.

CHAPTER V.

DISEASES COMMON BOTH TO THE PREGNANT, AND UNIMPREGNATED STATE.

HAVING in the first and second chapters treated of the diseases peculiar to the unimpregnated and pregnant state, it is proper that we devote a chapter to a few that are common to both states, and could not, therefore, be arranged with propriety under either.

SECTION I.

FLOUR ALBUS OR WHITES.

This complaint is characterized by an unnatural, white colored discharge from the birth-place, and may be produced from various causes. Whatever impairs the tone and action of the womb, may produce this complaint: such as, severe, protracted labors, repeated miscarriages, over fatigue, general bad health, or taking cold during the menstrual discharge. Women who are of weakly, delicate constitutions, and take but little active exercise are much afflicted with this disease. In many instances, where women are laboring under a suppression of the menstrual discharge, or some other general derangement of the system, the whites make their appearance monthly, instead of the natural menstrual discharge. As this complaint seldom terminates favorably without medical aid, means ought, at once, to be used for its removal; for if suffered to run on, it will entirely destroy the constitution, and finally end in consumption, dropsy, or something of the kind.

TREATMENT.

Few things are more important, at least in the early stages of this complaint, than the most scrupulous attention to cleanliness of the parts from which the discharges are made. The vagina should be washed out two or three times a day, by forcibly injecting two or three syringes of warm water in which a handful of soap wort, (page 190,) had been infused, or in which a small quantity of mild soap had been rubbed. After the passage has thus been well washed, throw up an injection made of birth root tea, or of any astringent tonic article, and to each injection add a tea-spoonful of the diaphoretic tincture. An occasional course of medicine may be necessary, and a course of bitter tonics should be used for the purpose of restoring the general health. Diaphoretic powders should also be used daily, in connection with the above.

SECTION II.

FALLING OF THE WOMB.

The falling or bearing down of the womb, though a local disease, is productive of the most distressing symptoms, and unless relieved, will injure the general health. This complaint is frequently met with among women who have borne many children, or had many miscarriages, especially those of a delicate constitution, and lax fibers.

This complaint may be brought on by going about too soon after delivery before the womb has gained its usual tone and strength. In single women this complaint may be occasioned by jumping, dancing, lifting some heavy weight, or some violent exertion during or soon after menstruation; and in some instances it has originated from a long continuation of the whites.

Falling of the womb is usually accompanied by a sense of bearing down; pains in the back, groins, and

privates; and if the complaint be suffered to go on, the urine is very frequently stopped in consequence of the womb descending into the vagina, and pressing upon the neck of the bladder. When this occurs the patient generally suffers the most excruciating pain. In the worst stage of this disease, the womb protrudes without the vagina, hanging down between the legs; and in this case, a complete cure is very difficult.

TREATMENT.

As this complaint proceeds from a loss of tone in the womb, it will require a patient, and persevering use of remedies, and a particular care in avoiding all exposure that will be likely to aggravate the symptoms; for the restoration of tone and action to any prostrated organ is not the work of a minute.

Injections made of a strong tea of witch hazel leaves, birth root, or any astringent tonic article, should be thrown up the vagina two or three times a day. At the same time, the patient should use the diaphoretic powders daily to keep up a gentle perspiration; the patient should also use two or three doses daily of the bitter and astringent powders combined, for the purpose of increasing the tone of the system generally. This course of treatment, pursued faithfully, with proper care to avoid any exposure, or any exertion that would aggravate the symptoms, will relieve any common case of the falling of the womb. But in cases where the womb has protruded beyond the vagina, the cure will be more difficult. The part protruded must first be washed with a strong tea of witch hazel leaves, birth root, or some astringent article; and then it must be carefully, and gradually pushed back to its place. After this is done, pursue the same course of treatment above described to restore tone to the womb. It will be necessary for the patient to keep her bed, until the tone of the womb is so far restored that it will keep its place; or she may if preferred, wear a pessary for the purpose of keeping it

to its place. The pessary is quite a simple instrument, made of wax, ivory, or gum elastic; and may be obtained at almost any apothecary shop.

SECTION III.

HYSTERICS.

Hysterics is commonly termed a nervous complaint; it appears under various forms, and is attended with a variety of symptoms, imitating those of various other complaints, from some of which it is often difficult to distinguish.

This complaint is more commonly met with in unmarried women than among those who have entered the conubial state, and more between the age of puberty and the forty-fifth year than at a later period. Girls at the approach of the menstrual discharge, and women who labor under a suppression, or any derangement of this discharge are most frequently the subjects of this complaint.

The symptoms which precede, and accompany an attack of the hysterics, are, stretching, yawning, dejection of spirits, anxiety, alternate paleness and flushing of the face, effusion of tears; a sense of oppression at the chest, palpitations of the heart, pain in the left side of the abdomen, with a peculiar sense of distention, giving the idea of a ball rolling about, and gradually advancing upwards, until it ascends to the throat, producing a choking sensation like some hard substance was lodged there. When the disease has attained its height, the patient seems to be threatened with immediate suffocation; she grows faint and falls down in a state of apparent insensibility; her limbs next become variously agitated with wild irregular actions, and often alternate fits of crying, screaming, and laughing take place; incoherent expressions are uttered, and a frothy discharge issues from the mouth. After sometime the spasms abate,

and a quantity of wind is evacuated, accompanied with frequent sobbing and sighing; and when the patient recovers sense and motion, she has no recollection of what has taken place: a pain in the head, and a soreness over the whole body remain.

TREATMENT.

When this disease proceeds from a derangement of the menstrual discharge, means must be employed to correct that derangement, according to the directions heretofore given under the proper head. (See chapter first on diseases peculiar to the unimpregnated state.)

Give the patient repeated doses of the diaphoretic powders, and if the symptoms be very bad, a dose or two of the antispasmodic tincture should be given. Asafœtida has long been prized as a good remedy in this complaint; and we should judge that carminatives generally, would be useful to expel the wind from the stomach.

When the disease is one of long standing, and the general health becomes much impaired, with a frequent return of the fits, repeated courses of medicine must be employed with two or three doses of the bitter laxative tonic daily, for the purpose of restoring the general health and tone of the system: and when the fits recur use the nervine powders, asafœtida, and antispasmodic tincture as above recommended.

CHAPTER VI.

DISEASES OF CHILDREN.

It is perhaps necessary that we give a short treatise on the diseases of childhood; but as many of the diseases that children in common with grown persons are subject to, have been described, and the general principles of treating them laid down in the foregoing part of this work, it will not be necessary that we enter into a minute detail of the subjects that remain to be described. Indeed, it has been our object in the whole progress of the work, to lay down general principles rather than enter into minute details, unless in cases where we deemed such minutia essential.

SECTION I.

RETENTION OF THE MECONIUM.

All children at their birth have a dark greenish colored matter in their bowels technically termed meconium. If this be not discharged in a reasonable time, it becomes a certain cause of irritation and disease. Nature has designed that the first milk drawn from the mother's breast should so operate upon the bowels of the infant, as to evacuate this offensive matter by stool. On this account, the child should be put to the breast as early as possible after birth. It is true that there may be no milk in the breast for twenty-four or even thirty-six hours after delivery, nor is it very important there should be; but there is a substance in them termed colostrum, which appears to be especially intended to procure the evacuation of the meconium. But if the child will not suck, or if the colostrum does not produce stools, give

the child a little cow's milk, weakened with water, and sweetened with molasses or sugar; and you may give an injection of the same if the bowels appear still costive. If one injection should not cleanse the bowels properly, repeat it until they are completely evacuated.

SECTION II.

RETENTION OF THE URINE.

New born infants are frequently afflicted with a suppression of urine; and although the difficulty is in general easily removed, yet if neglected it has in some instances terminated fatally. Particular attention should, therefore, be paid by the nurse to see if the child discharges urine in a reasonable time after birth, and also that it continue to do so at proper intervals afterwards; for it may pass its urine at first, well enough, and a suppression of it afterwards take place.

TREATMENT.

Give repeated doses of a strong tea of parsnip roots, sweetened with molasses or sugar. The bowels over the region of the bladder, should be bathed with some stimulating liquid with frequent, gentle rubbing. The above has long been the popular remedy. Of late, the tea of pumpkin seeds, administered in small doses, has acquired some reputation for its safety and efficacy in the treatment of this disease. The tea of water-melon seeds is sometimes employed for the same purpose.

SECTION III.

COLIC AND GRIPING.

These are very common complaints among children; and are often very painful and troublesome.

Laudanum, paragoric, Bateman's drops, and Godfrey's cordial, the common resort in these complaints, says a distinguished physician, a correspondent of the New York Medical Inquirer, these remedies containing opium, only give temporary relief without removing the cause of disease.

Whether colic arise from flatulence, or from acidity, the neutralizing mixture, page, 303, is a very pleasant, and generally an effectual remedy:—it should be given in half tea-spoonful doses oft repeated until relief be obtained. A tea of ginseng is very good in some cases. Bathing the belly before the fire, with some stimulating drops is valuable.

SECTION IV.

THRUSH OR SORE MOUTH.

This is a very common complaint among children. The disorder appears in small white specks, resembling coagulated milk, on the tongue, corners of the lips, and on the inside of the checks, gradually extending over the whole inside of the mouth and throat; and in some instances, when suffered to run on a long time, it extends down through the alimentary canal.

This complaint is supposed to proceed from acidities in the stomach and bowels, occasioned by some particular quality of the milk, or by improper food.

TREATMENT.

First remove the acidity from the stomach by the use of the neutralizing mixture, page, 303. If the bowels are costive it will be proper to give a dose of the butter nut sirup, or of rhubarb to aid the neutralizing mixture to carry off the acrid, offensive matter from the bowels. This being done wash the child's mouth repeatedly with some astringent tea, such as bayberry, birth root, beech drops, pond lily, &c. These articles may be employed

separately, or combined. The tea used for the wash should be sweetened with honey; and the child should, at each time, after the mouth is washed, be made to swallow some of the tea.

SECTION V.

YELLOW GUM, OR JAUNDICE.

This complaint is similar to the jaundice in adults. The skin is yellow, the eyes and urine are also tinged with the same color; the stools are white or clay colored, and the bowels costive.

TREATMENT.

The imported ipecacuanha, is recommended by some physicians as having quite a salutary effect in this complaint. Take one fourth tea-spoonful of the pulverized ipecac, and draw it in a fourth of a tea-cupful of boiling water;—of this tea give about a half a tea spoonful every ten or fifteen minutes until vomiting is produced. After the operation of the emetic give about a fourth of a tea-spoonful of equal parts of yellow poplar bark and black root. This having operated as a purge, the quantity of the black root must be diminished about one half; and then, the poplar bark and black root must be administered daily for a laxative tonic until a cure is effected. If the case be obstinate, the emetic must be repeated. Sweating the patient freely has a salutary effect in this complaint. During the whole treatment give freely of the diaphoretic powders.

SECTION VI.

RED GUM.

This is a cutaneous disease, breaking out in pimples principally about the face and neck, and sometimes on the arms and legs. These pimples are generally of a red color, though they are sometimes yellow.

Nothing is required but to avoid cold, and keep the eruption from striking in, as it is by no means dangerous while kept out. But if the eruption strike in, the child soon appears greatly distressed in its bowels, crying constantly, and frequently goes into fits, unless relieved. To bring out the eruption, you may administer first a stimulating injection to relieve the bowels, then give some diaphoretics, to produce a free perspiration, and this will generally cause the eruption to strike out; but if it be slow, in addition to the above, you may give some of the tincture of lobelia, which will soon have the desired effect.

SECTION VII.

TEETHING.

Teething, or cutting teeth as it is familiarly called, although a natural function of the living, healthy system, is often attended with much suffering, and sometimes much danger. The symptoms commonly attendant upon difficult, and painful teething, are, pains, and gripings of the bowels, frequent discharges of various colored stools, as green, pale yellow, dark brown, or black; cough and difficulty of breathing, fever, startings during sleep, twitching or spasms, and sometimes convulsions.

TREATMENT.

Relieve the griping by giving the neutralizing mixture to correct and remove the acrid matter from the stomach and bowels. It, perhaps, may be necessary to add a little butter nut syrup to give more activity to the operation of the medicine. The irregularities of the bowels may be corrected by the use of astringent tonics, diaphoretic powders, and the slippery elm tea injections.

Where teething appears to be very difficult, and pain-

ful, it will be proper to make an incision immediately over the tooth with a lancet or sharp knife. This is easily done, and is attended with very little pain to the child; and the relief obtained is very great.

CHOLERA INFANTUM.

This complaint is generally characterized by a puking and purging. Sometimes in mild attacks it comes on with a simple looseness of the bowels accompanied with slight sickness at the stomach; but in some violent attacks, there is both vomiting and purging, often attended with spasmodic irritation, similar to cholera morbus in adults. An attack of this complaint is followed by rapid emaciation; the skin on the forehead becomes tight, as if bound to the bone; the eyes are sunk; the cheeks fall in; the nose is sharp, and the lips are shrivelled.

TREATMENT.

In the first onset of this complaint, the free use of the neutralizing mixture will seldom fail to remove all the symptoms. The bowels should be relieved of the irritating contents by injections of slippery elm tea. If the stomach is not relieved by this, cleanse it with an emetic; and if the vomiting does not cease, employ some of the antiemetics to allay the irritation of the stomach, and check the vomiting. After this, the use of the diaphoretic powders, and the astringent tonic powders will generally complete the cure.

GLOSSARY,

OR EXPLANATION OF THE TECHNICAL TERMS.

- Abdomen*, lower part of the belly.
Abortion, expulsion of the foetus before the seventh month.
Abscess, a tumor containing matter.
Absorbents, 1st. medicines that correct acidity, and dry up superfluous moisture: 2nd. Small, delicate vessels that absorb fluid substances, and convey them to the blood.
Absorption, the act of sucking up substances.
Accoucher, one who assists at child-birth, a midwife.
Ascescent, tending to acidity.
Acidulated, impregnated with acids.
Acid, that which imparts a sharp or sour sensation.
Acrid, burning, pungent, corrosive.
Acme, full height, crisis of a disease.
Acute, a term applied to a disease denoting violent symptoms, hastening to a crisis.
Adult, a person, full grown.
After-birth, the soft, fleshy substance, that connects the foetus to the womb.
Ague-cake, enlargement of the spleen.
Albumen, a proximate ingredient of animal substance, coagulable with heat, similar to the white of an egg.
Aliment, food and drink; nourishment.
Alimentary canal, the stomach and intestines.
Alcohol, rectified spirits of wine.
Alkali, any substance uniting with an acid, neutralizes, or destroys its acidity.
Alternate, changed by turns: in botany, leaves and branches are said to be *alternate*, when they grow out singly on opposite sides of the stem, rising above each other in regular order.
Alvine, pertaining to the belly, or intestines.
Amenorrhea, an obstruction of the menses.

- Amputation*, the act of cutting off a limb.
Anatomy, the dissection of organized bodies.
Annual, yearly; every year.
Anodyne, any medicine which eases pain.
Antacid, that which destroys acidity.
Anthelmintics, that which destroys or expels worms.
Antibilious, that which removes or corrects the bile.
Antidote, a medicine that destroys poison.
Antidysenteric, that which prevents, or cures dysentery.
Antiemetic, a remedy for vomiting.
Antimorbid, that prevents, or cures morbid action.
Antiphlogistic, counteracting inflammation.
Antiscorbutic, preventing or curing scurvy.
Antiseptic, that which prevents or removes putrefaction.
Antispasmodics, remedies for spasms.
Antisyphilitic, that which prevents or cures the syphilis.
Anus, the fundament.
Ap'rient, opening.
Aphthous, resembling the thrush.
Aphthæ, small, whitish ulcers in the mouth.
Areola, the circle surrounding the nipple.
Aorta, the great artery of the body.
Artery, the canal conveying the blood from the heart to all parts of the body.
Aromatic, fragrant, spicy, pungent.
Asthenic, Dr. Brown's title for diseases arising from debility.
Astringents, medicines that correct looseness and debility, rendering the solids denser and firmer.
Axis, in anatomy it means the second vertebra or joint of the neck.
Axillary, in botany it means the angle formed by a branch with the stem, or by a leaf with the stem or branch.
Axillary glands, are the glands situated in the armpits.
Auricle, the name given to those parts of the heart which resemble small ears.
Autocracia, the healing power of nature.
Attenuants, medicines for reducing the body.
Belching, ejecting wind from the stomach.
Biennial, a botanical term applied to those plants which form their roots and leaves the first year, and produce their fruit the second, and then die.
Bile, the bitter, yellowish fluid secreted by the liver.
Biternate, having three.

Bract, a small leaf.

Botany, that part of natural history which relates to the vegetable kingdom.

Bulbous, a botanical term denoting a round, oblate shape like that of an onion.

Bursa mucosa, the mucus bag that contains and secretes the fluid, which lubricates the tendons, muscles and bones.

Calculi, small gravel or stones.

Caloric, the chemical term for the matter of heat.

Calyx, a cup; the external covering of an unexpanded flower.

Canker, small corroding ulcers.

Cantharides, Spanish flies.

Capillary vessels, very small blood vessels.

Capsule, the part of the plant containing the seed.

Carbon, one of the elementary constituents of matter, the chemical name for purified charcoal.

Carbonic acid gas, fixed air, compounded of carbon and oxygen.

Carminative, that which expels wind from the stomach.

Caries, rottenness.

Catajasm, a poultice, soft plaster.

Cartilage, a white, elastic substance connecting the bones.

Catarrh, a discharge from the glands about the head and throat.

Cathartic, a purgative medicine.

Catheter, a small tube, for drawing off the urine, by being introduced into the bladder.

Caudex, a botanical term denoting the main head or body of a root.

Caustics, burning applications.

Cautery, the act of burning with caustic or with hot iron.

Cellular, consisting of cells.

Cerebral, appertaining to the brain.

Cerebrum, the brain.

Cerebellum, that part of the brain lying in the back part of the cavity of the head.

Chancre, a venereal ulcer.

Choleric, easily irritated.

Chronic, a term denoting a disease of long continuance.

Chyle, a white milky fluid separated from the chyme by the lacteals.

Chyme, food partially digested.

Clinical, pertaining to observations and practice at the bed-side of the sick.

Clyster, a liquid substance injected into the bowels.

Colliquative, any excessive, debilitating discharge from the body.

Coma, or *comatose*, inclining to sleep.

Concrete, a collected, united mass.

Connate, growing from one base, united together.

Coagula, clots of blood.

Conception, the impregnation of the womb.

Constipation, great costiveness.

Constriction, a drawing together, contraction.

Contagious, caught by infection.

Contusion, a bruise.

Cordate, having the shape of a heart.

Corroborants, tonics.

Corrosive, consuming, eating away.

Convalescence, the state of returning health after sickness.

Convulsion, a violent spasmodic affection, a fit.

Corymb, a cluster of flowers at the top of a plant forming an even, expanded surface.

Cranium, the skull.

Crepitus, a crackling sound.

Cutaneous, belonging to the skin.

Cuticle, the outward skin.

Cutis vera, the true skin, covered by the cuticle.

Cyme, or *cyna*, an aggregate flower, like the sunflower.

Cymous, bearing cymes.

Decarbonizing, depriving of carbon.

Decoction, a preparation by boiling.

Decumbent, reclined, bending down.

Deglutition, the act of swallowing.

Deliquium, swooning, fainting.

Delirium, craziness, alienation of mind.

Demulcent, softening, sheathing.

Dentition, teething, cutting teeth.

Detergent, cleansing.

Diaphoretic, promoting perspiration.

Diaphragm, the membrane separating the thorax from the abdomen, the midriff.

Diarrhœa, looseness of the bowels.

Diathesis, disposition, or peculiar habit of the body.

Diffusible, capable of being diffused or spread.

Digestion, the process of dissolving aliment in the stomach.

Digest, to dissolve by the action of a solvent; to infuse any medicinal substance in spirits; to soften and prepare by heat.

Dilation, expanding, opening, enlarging.

Dilatation, the act of expanding, or enlarging.

Diluent, a solvent, that which thins or weakens a fluid.

Discutient, an application to disperse a tumor.

Distend, to stretch, to spread apart.

Diuretic, a medicine that increases the secretion of urine.

Drastic, strong, active, violent.

Drype, the hard shell that incloses the seed or kernel.

Drupeaceous, the botanical term for any pulpy fruit inclosing a drupe.

Duct, a small tube or vessel.

Duodenum, the first portion of the small intestines.

Dyspepsy, indigestion, bad digestion.

Eccymosis, a tumor caused by blood letting.

Efflorescence, redness of the skin around an eruption.

Effuria, excretion.

Electuary, medicine mixed with honey or molasses.

Element, first principle; an ingredient not susceptible of chemical division.

Embryo, a physiological term denoting the first germ of existence in the womb, before the several members are distinctly formed.

Emetic, a medicine which excites vomiting.

Emmenagogue, that which promotes the flow of the menses.

- Emollient*, that which softens and relaxes the solids.
Empiric, a quack.
Emunctory, an organ to secrete and carry off excretitious matter.
Enamel, the outside covering of the teeth.
Endemic a disease limited to a certain district.
Enema, a clyster, an injection.
Ephemera, a term applied to a fever that has but one paroxysm.
Epidemic, a contagious disease attacking many people the same season.
Epidermis, the thin membrane covering the true skin, the cuticle.
Epithegm a poultice.
Epigastric region. that part of the abdomen immediately over the stomach.
Epispastics. applications to blister.
Epistaxis, bleeding at the nose.
Erosion, the act of eating away, consuming.
Errhines, articles that excite sneezing.
Eruption, the act of belching wind from the stomach.
Eruption. a breaking out on the skin.
Escharotic, caustic.
Exacerbation, an increase of the febrile symptoms.
Exanthematic. eruption and redness of the skin.
Excoriare, to strip, wear or rub off the skin.
Excretive, having the power to separate, and remove fluid matter from the body.
Excrement, the alvine faeces, or stools,
Excretory ducts, small vessels in the glands, that perform the excretive process.
Exhalents, small vessels that carry off the wornout matter.
Exhibition, the act of administering medicine.
Expectorants, medicines that promote the discharge of mucus from the lungs.
Extravasation, a term applied to fluids which are out of their proper vessels.
Extremities, arms and legs.

Fæces, excrements, stools.

Farinaceous, mealy.

Fauces, the back part of the mouth.

Febrile, indicating fever, pertaining to fever.

Febrifuge, that which removes fever.

Fallopian tubes, two small tubes attached to the womb on opposite sides.

Fibrous, consisting of small threads.

Flaccid, soft, spongy, limber.

Flatulency, windiness, in the stomach and intestines.

Fœtus, the child enclosed in the womb.

Fomentation, the application of flannels dipped in hot water.

Flooding, an excessive flow of the menses.

Fontanelle, a vacancy in the cranium or skull of infants.

Formula, a specified form; a prescription.

Friction, the act of rubbing.

Fracture, a broken bone.

Funigation, the application of fumes or vapors.

Function, the particular office performed by any organ.

Fundament, the seat; the aperture from which the excrements are ejected.

Fungus, proud flesh, or any other excrescence.

Fur, the coat of morbid matter upon the tongue.

Gangrene, the incipient stage of mortification.

Gargle, a wash for the mouth and throat.

Gas, a permanently elastic aeriform fluid.

Gastric, pertaining to the stomach.

Gastric juice, the fluid secreted by the stomach, which is the principal agent in the process of digestion.

Gastritis, inflammation of the stomach.

Gland, an organ composed of blood vessels, nerves, and absorbents, destined for the secretion or alteration of any particular fluid.

Granulation, the act of forming into small grains.

Generative, the act of begetting, or propagating a being.

Gestation, the state of pregnancy; carrying the fœtus.

Hectic, a slow continual fever.

Hemiplegy, a palsy, affecting one half of the body.

Hemorrhages, a discharge of blood.

Hemorrhoids, the piles,

Hemorrhoidal, pertaining to the piles.

Hepatic, pertaining to the liver.

Humoral, pertaining to the fluids, of the body.

Hydragogue, that which promotes the discharge of humors from the body.

Hydrogen, the lightest gas known, and is one of the constituents of water.

Hypochondriasis, dejection of spirits, melancholy.

Hypocondriac region, the space under the false ribs on the right and left of the abdomen.

Hypocondriacal, low spirited.

Hypogastric region, the lower part of the abdomen.

Hymen, the virginal membrane, partly closing the passage of the vagina.

Hysterics, a disease peculiar to women, characterized by spasmodic and nervous affection, and often attended with hypochondriacal symptoms.

Ichor, a thin watery humor.

Idiopathic, a term applied to diseases that exist independent of all other complaints.

Idiosyncrasy, the peculiar temperament or constitution of the body.

Imposthane, a collection of parulent matter.

Inanition, emptiness.

Indented, notched.

Indigenous, native.

Infectious, communicating disease by contagion.

Infuse, to steep in a liquid without boiling.

Inguinal, pertaining to the inguinus or groin.

Inhale and *inspire*, to draw air into the lungs.

Insipissate, to thicken a fluid by evaporation.

Integument, a covering.

Intestines, the convoluted, membranous tubes in the abdomen, vulgarly called guts.

Intermittent, ceasing for intervals of time.

Jejunum, the second portion of the small intestines so called because commonly found jejune, or empty after death.

Juleps, mixtures.

Jagged, uneven: having jags or teeth.

Labia pudendi, the lips of the organs of generation.

Lachrymal, pertaining to tears, or the glands by which they are secreted.

Lacteals, the small vessels which absorb the lac or chyle.

Lanceolate, oblong, shaped like a lancet.

Laxatives, a gentle cathartic.

Lesion, a wound; a hurt.

Ligature, a bandage.

Ligament, a strong membrane connecting the joints.

Linea alba, the straight line from the pit of the stomach through the navel to the pubes.

Lithotomy, the operation of cutting the stone out of the bladder.

Lithontriptics, substances which will dissolve the stone or gravel.

Lobe, a division of the lungs.

Loin, small of the back.

Local, belonging to a part and not the whole.

Lubricant that which makes the part to which it is applied, smooth and slippery.

Lumbar, pertaining to the loins.

Lungs, organs of respiration.

Lymph, the colorless fluid separated from the blood by the lymphatics.

Mastication, chewing.

Materia medica, description of medicines.

Meatus urinarius, the external orifice of the urethra.

Mecoumin, first stools of an infant.

Membrane, a thin delicate skin.

Mediastineum, the membrane dividing the cavity of the chest in two parts.

Menses, monthly courses.

Menstruation, the act of discharging the menses.

Menstrual, pertaining to the menses.

Mephitic, offinating: noxious.

Miasma, putrid exhalations.

Menstruum, any fluid used as a solvent.

Morbid, diseased, unhealthy.

Mucilage, a glutinous, slimy substance.

Mucus, the slimy fluid secreted by the mucous membrane.

Muscles, the organs of motion.

Narcotic, that which produces sleep by stupefaction.

Nausea, inclination to vomit.

Nervine, that which relieves disorders of the nerves.

Nitrogen, an elementary gas, composing about four fifths of the atmosphere.

Nosology, the classification of disease.

Oesophagus, the tube which conveys the food to the stomach.

Oblong, longer than broad.

Obtuse, a dull heavy pain; opposite to acute.

Organ, any part capable of performing some distinct operation.

Oxygen gas, an elementary gas composing about one fifth of the atmosphere.

Orifice, an opening.

Pancreas, a soft gland, which secretes a kind of saliva, and pours it into the duodenum to aid digestion.

Paralytic, relating to palsy.

Paroxysm, a periodical attack or fit of a disease.

Pathology, the doctrine of disease.

Peduncle, the stem that supports the flower.

Perennial, in botany, a plant that lives more than two years.

Peristaltic, the motion of the intestines by which they expel their contents.

Perspiration, evacuation of fluid matter through the pores of the skin.

Petioles, the foot stalks of a leaf.

Pinnate, a compound leaf, composed of one stem and several small leaves on each side of it.

Pessary, an instrument introduced into the vagina to support the uterus.

Plethora, a fullness of habit; fullness of the vessels.

Physiology, the science which treats of the phenomena of living beings.

Prolapsus, a falling down.

Pulsation, the throbbing of the heart, or of an artery.

Pleura, the membrane which lines the internal surface of the thorax.

Pulmonary, pertaining to the lungs.

Quartan, recurring every fourth day.

Quotidian, recurring every day.

Racemes, growing in clusters.

Radiating, spreading, or shooting in the form of rays.

Radical, pertaining to the root.

Rectum, that part of the intestines which reaches to the anus.

Refrigerating, cooling.

Respiration, the act of breathing.

Retching, straining to vomit.

Resolution, the dispersing of a tumor.

Rigidity, stiffness; want of pliability.

Rigor, a sense of chillness, with contraction of the skin.

Rubefacient, an application that reddens the skin without blistering.

Saliva, the fluid secreted by the salival glands.

Salivation, an unusual secretion of saliva, usually produced by mercury.

Sanguiferous, conveying or carrying blood.

Sciatica, a rheumatic affection of the hip joint.

Secretion, the act of separating substances from the blood.

Sedative, that which moderates muscular action.

Sensorium, the brain, because it is the seat of sensation.

Sialagogues, medicines which increase the secretion of saliva.

Serrate, notched like a saw.

Sinapism, a poultice of mustard vinegar and flour.

Solvent, that which has the power to dissolve.

Spinal, pertaining to the back bone.

Stimulants, medicines that excite action and energy in the system

Strangury, difficulty in voiding urine.

Styptics, medicines that check the flow of blood.

- Sudorifics*, medicines that produce sensible perspiration.
Syphilis, the venereal disease.
Tent, a roll of lint placed in the opening of an ulcer.
Terminal, terminating, growing at the end of a stem.
Tertain, a disease whose paroxysms return every other day.
Technical, belonging to the arts.
Tendon, the extremity of a muscle by which it is attached to a bone.
Thorax, the ch'est.
Tonics, medicines that increase the tone or strength of the system.
Topical, confined to some particular part.
Transpiration, the exhalation of fluids from the pores of the skin, or from the lungs.
Tumor, a swelling.
Typhoid, resembling typhus; weak, low.
Triennial, lasting three years.
Tonsils, the glands situated on each side of the fauces.
Umbel, a flower resembling an umbrella.
Umbeliferous, bearing umbels.
Umbilical, pertaining to the navel.
Ulcer, an ill conditioned, running sore.
Urethra, the canal conveying the urine.
Uterus, the womb.
Vru'a, the palate.
Vagina, the canal leading to the womb.
Ventilation, a free admission of air.
Ventricles, the cavities of the heart which propel the blood into the arteries.
Vermifuge, medicines that expel worms.
Vertigo, giddiness of the head.
Viscera, the entrails.
Whorls, flowers or leaves growing round a stem in a ring.

GENERAL INDEX.

Abdomen, division of,	18	Anise seed, use of,	236
Abortion, causes of,	628	Anger, definition of,	103
—article to prevent,	246	—effects of,	104
Abscess,	424	—restraint of,	105
Absorbents or antacids,	302	Animal heat, nature of,	51
—medical use of,	ib.	—equilibrium of,	52
Absorbent & aperient mixture,	303	—generation of,	53
Acetousacid,	153	—use of,	57
Addertongue,	150	—waste of,	58
Adhesive plaster, use of,	371	Anodynies, class of,	204
After pains,	647	Anodyne powders,	304
—remedies for, 216, 305,		—tincture,	305
162,		Annual roots, when gather-	
Ague and fever,	407	ed,	299
Ague bark,	255	Antidiarrhoeics, class of,	392
Ague cake, what,	5	Antidysenteric decoction,	319
Agrimony, description of,	157	Antiseptic tonic pow-	
Air, elements of,	8	der,	324
—effects of on the blood, 4		—sirup,	326
—how deoxygenated,	8	Antiseptics, class of,	308
—anecdotes of,	86—87	—various recipes for,	
Albumen, properties of,	1	303—309	
—lubricates the joints, i		Antispasmodics, class of,	128
Alimentary canal, what, 2		—intoxicants,	ib.
Allspice tree,	2	—various recipes for,	310
Alkaline clyster,	2	Antiseptics, class of,	138
Alkaline poultice,	37	—various recipes for,	
Aloes, or aloe, three kinds,	236	311—316	
Alum root,	167	Antiseptic poultice,	368
Amaranth,	158	—clyster,	363
American ipecacuanha,	297	—bathing drops,	328
American senna,	278	Anthelmintics, class of,	177
Anasarca, see dropsy,	440	—various recipes for,	
Anatomy, definition of,	13	306—308	
—Chesselden's remarks, ib.		Apoplexy, two kinds,	422
—use of,	13—14	Arrow root,	168
Angelica, use of,	264	Arteries, use of,	27—28
Angustura bark, history of,	217	Askew, anecdote of,	93
		Ascites, see dropsy,	440

Astringents, class of,	157	—— articles good for, 132,
Astringent poultice,	370	207, 244, 291,
Astringent clyster,	364	Bite of reptiles, 565
Aromatic cordials,	336	—— remedies for, 291, 215, 197
Asparagus infusion,	346	Bitter dog's-bane, 249
Astringent tonics, class of,	317	Bitter root, 249
—— various recipes for,	317—320	Bitter-sweet, 253
Asafetida plant,	129	Bitters, 323
Asarabaca,	294	Bitter tonics, class of, 321
Ash tree,	266	—— various recipes for, 321—322
Asthma, 421; remedies for,		Black alder, 141
131—291		Black alder, 246
Atrophy, 580; remedy for,	311	Black cherry, 166
Auricles, what,	28	Black birch, 275
Avarice, description of,	110	Black berry, 167
—— effects of,	111	—— sirup, 320
—— anecdotes of,	112	Black cohosh, 181
Back-ache, remedy for,	235	Black pepper, 237
—— root,	235	Black root, 280
Baglivi's theory of life,	33	Bladder, use of, 25
Baldness, cure for,	378	—— inflammation of, 499
Balm, Irish anecdote of,	268	Bleeding, effects of, 37—39
Balmony,	254	Bleeding from the nose, 427
Balm of Gilead,	171	—— remedies for, 148, 170
Balsam of fir,	151	Bleeding of the lungs, 428
Barberry,	252	Bleeding from the stomach, 430
Barks, time to gather,	300	—— remedies for, 172, 162,
Barm,	155	Blessed thistle, 182
Bathing drops, class of,	327	Blood, circulation of, 27—28
—— various recipes for,	327—328	—— decarbonization of 29
Bayberry,	164	Blood vessels, two kinds of, 27
Bearberry,	168	Bloody flux, see dysentery,
Bear's-foot,	148	Bloody urine, 432
Beech drops,	163	—— remedies for, 172, 277
Benne plant,	284	Blood root, 221
Beth root,	147	Blue berry, 129
Biennial roots, time to gather,		Blue cardinal flower, 202
299		Blue cohosh, 129
Bile, secretion of,	22	Blue flag, 244
—— use of,	. ib.	Blue lobelia, 202
Bind weed,	195	Body division of, 17
Bite of mad dog,	543	—— integuments of, ib.
		Boils, 456

—remedies for, 370, 374,	375	poultice,	377
Bones, use of,	19	salve,	373
Boneset,	257	Candleberry,	164
Bowel complaints,	452—453	Canine madness,	543
—remedies for, 279, 303,	167, 320, 158, 277	Caraway,	240
Bowman root,	280	Carbuncles,	459
Box tree, box wood,	256	Carminatives, class of,	333
Brain, location of,	19	—intention of,	<i>ib.</i>
—office of,	<i>ib.</i>	—various recipes for,	
Breasts, form of,	26	332—334	
—office of,	<i>ib.</i>	Carolina pink,	179
—inflamed,	649	Carrot poultice,	370
Brewer's foam,	155	Catarrh, or cold,	506
Brinton root,	280	Cathartics, class of,	277
Broom rape,	163	—various recipes for,	
Brown's theory of life,	33	320—331	
—theory of disease,	117	Catmint, catnip,	134
Broken bones,	582	Caustics, class of,	353
Bruises,	430	Cayenne,	233
—remedies for, 159,	173,	Celandine,	194
243, 315, 327	559	Centaury,	270
Bubo's,	272	Chamomile,	128
Buck bean,	283	Charcoal,	153
Buckthorn,	256	Chancres,	559
Burning bush,	456	Chamber's recipe for an e-	
Burns and scalds,	456	metic.	507
—remedies for, 173, 205,	365	Checkerberry,	185
Bunnel's pills,	332	Chesselden, remark of,	13
Burdock,	192	Chicken pox,	479
Butterfly weed,	232	Chincopin,	269
Butternut,	279	China tree,	178
Button snake root,	189, 235	Chocolate root,	161
Calimus,	243	Cholera, spasmodic,	498
Caloric, Tourtell's view of,	32	—remedies for, 285, 384,	
Camphor tree,	231	382	
Canad. balsam,	151	Cholera infantum,	662
Cancer,	400	—remedies for, 303—304	
Cancer root,	163	Cholera morbus,	455
—balsam,	371	—remedies for, 129, 160,	
—plaster,	373	393, 304	
		—mixture,	382
		—syrup,	384
		Chorea or St. Vitus' dance,	527
		—remedy for,	132

Chremes, anecdote of,	66	Contracted joints, cure for,	388
Chronic eye water,	360	Convulsions, articles for,	133,
Chyle, use of,	23	208, 239, 311, 379, 383	
Chyme, what,	ib.	Cordials and essences,	336
Cinnamon tree,	235	Cornaro, anecdote of,	67
Cinquefoil,	165	Corns,	459
Clap, see venereal disease,	558	—remedies for,	128, 212
Clapweed,	214	Cornsnake root,	196
Cleanliness,	81	Coriander,	275
—importance of,	81—82	Comfrey,	173
Cleansing beer,	391	Costiveness,	450
Cleavers or clivers,	197	—remedies for,	363, 364
Clothing, use of,	78	Costiveness and piles,	626
—proper kinds of,	79	Coughs, remedies for,	131, 161,
Clotbur,	192	169, 181, 184, 195, 212, 219,	
Clove tree,	183	226, 356	
Clysters,	361	Cough drops,	356
Cobweb,	136	Course of medicine,	395
Cocklebur,	157	Cowardice, what,	98
Cocash,	160	Cowhage, cowitch,	177
Cohosh or cohush,	129	Cow pox,	552
Cock-up-lift,	214	Cramp,	446,—623
Colds or catarrh,	596	—remedies for,	129, 130, 195,
Cold, effects of,	589	231, 311	
Cold bath,	403	Crane's bill,	169
Colic,	411	Craziness, see insanity.	
—remedies for,	130, 161,	Crosswort,	257
185, 195, 246, 274, 331		Croup,	574
Colic and griping,	65	—remedies for,	223, 242, 249,
—remedies for,	130, 225,	291	
303, 304, 331.		Cullen's theory of disease,	116
Colic drops,	331	—absurdity of,	117
Colic root,	375	—failure of,	ib.
Columbo root,	239	Cureall,	161
Colt's-foot,	231	Curled dock,	144
Compound aromatic cordial,	537	Cutaneous transpiration,	48
Compound antispasmodic tincture,	311	Cuts,	457
Compound nervine tincture,	313	—remedies for,	152, 161, 171,
Conception,	618	374, 375, 376	
Constipation see costiveness,		Cutting teeth,	661
Consumption,	576	Cutting almond,	206
—remedies for,	161, 168,	Dandelion,	200
181, 200, 225, 294, 356, 381		Darwin's theory of life,	33
		Deafness,	471

—remedies for, 149, 242, 383		Dragon's claw, 260
Deerberry, 227		Dropsy, 440
Decarbonization of the blood, 29		—remedies for, 193, 194, 195, 197, 204, 344, 383.
Delirium, 539		Drowning, 585
Delivery, 630		Drunkenness, 542
—treatment after, 644		Drug poultice, 369
—diseases consequent on, 646		Dysentery, 453
Dewberry, 167		—remedies for, 151, 158, 161, 167, 168, 173, 248, 305, 306.
Diabetes, 439		Dyspepsy, 572
—remedy for, 272		—remedies for, 161, 248, 258, 264, 302, 303, 304, 326.
Diaphoretics, class of, 181		Dwarf bay, 238
—various recipes for, 337, 343		Earache, 477
Diarrhea, 452		—remedies for, 149
—remedies for, 151, 158, 161, 167, 168, 173, 248, 305, 306		Edge leaf, 189
Difficulty of urine, 434		Elder, 204
Digestion, process of, 23		Elecampane, 220
Directions for gathering and preserving medicines, 298		Elementary materials of the body, 15
Discutient ointment, 366		Einetic Dr. Chamber's recipe for, 507
Dyspensatory, 301		Emetics, class of, 289
Disease, 113		—various recipes for, 349, 355
—various theories of, 115		—how to administer, 401
—Blane's remark on, ib.		Emetic herb, 289
—causes of, 122		Empedocle's enumeration of the elements of the body, 15
—distinctions of, 123		Emunctories, office of, 47
Diseases common to the pregnant and unimpregnated state, . 652		Envy, definition of, 107
Diseases of children, 651		—effects of, 108
—peculiar to the unimpregnated state, 668		Epilepsy, 447
—of the pregnant state, 610		—remedies for, 129, 132, 208, 239, 311, 379, 383.
Dislocations, 581		Erysipelas, 483
Hittany, stone mint, 18		Escharotics, 353
Diuretics, class of, 192		Esculapius anecdote of, 66
—various recipes for, 343 347		Essences, cordials &c. 336
Division of the body, 17		—various recipes for, ib.
—of the trunk, 18		Evan root, 161
Dock, yellow dock, 144		Evacuations, 77
Dog fennel, 248		Evaporation, effects of, 59
Dogtooth violet, 150		Excretions, what, 47
Dog wood, 256		—by transpiration, ib.
Doses of medicine, 391		—by urine, 48
		—by stools, ib.

—importance of,	49	Fever, milk,	650
Expectorants, class of,	219	Fibrin, properties of,	16
—various recipes for,		Fit root,	132
355, 357		Fivefinger,	165
Exercise, effects of,	73	Fits, remedies for, 132, 208, 239	
—necessity of,	74	311, 279, 383	
—the law of the Romans		Flax seed,	201
& Athenians concerning,	74	Flea bane,	215
Exhalents, office of,	47	Flooding,	646
Eye waters, recipes for,	359	—remedies for, 148, 318	
Fainting,	584	Flour albus,	652
—articles good for,	234,	—remedies for, 151, 173, 205,	
336, 337, harts horn.		381	
Falling of the womb,	653	Flowers, time to gather,	300
—of the palate,	583	Flux,	453
—of the fundament,	583	Flux root,	232
Fashion, effects of,	80	Flux weed,	285
Fear, definition of,	98	Food and drink,	64
—modifications of,	ib.	Fractures,	582
—effects on society,	ib.	Freezing,	588
—effects of on the sys-		Frost weed,	160
tem,	99	Frostbite,	588
—three anecdotes of,	100	Gamboge,	279
Felon,	466	Gangrene, see mortification.	
Felon salve,	375	Garget root,	140
Fennel,	247	Garlic,	241
Fernbush,	159	Gastric juice, use of,	23
Ferngate,	ib	—solvent power of,	ib.
Fever, general remarks on,	425	Gathering medicines,	298
Fever, bilious or remittent,	410	Gelatin, properties of,	17
—remedies for, 184, 186, 252,		Gentian,	260
254, 258, 269, 272, 295		Giddiness,	471
Fever and ague,	407	Gillenia,	295
—remedies for, 187, 190, 203,		Ginger, various kinds of,	229
237, 257, 275		Genseng,	134
Fever, inflammatory,	412	Glands, use of,	21
—remedies for,	193, 200	—composition of,	ib
Fever, nervous, typhus, and		—different kinds of,	ib
putrid,	414	Glossary,	663
—remedies for, 155, 190, 231,		Golden seal,	260
226, 252, 272, 281, 391		Gold thread,	255
Fever, scarlet,	417	Gonorrhœa, see venereal dis-	
—remedies for, 252, 281		ease.	
Fever, yellow or malignant,	419	Goose grass,	197
Fever, childbed,	648	Gravel, or stone,	435

—remedies for, 161, 178, 193, 195, 196, 197, 199, 205, 209, 210, 224, 346, 386	Hoodwort,	131
Gravel root,	Hooping cough,	595
Gout,	—remedies for, 212, 225, 230 385	
—remedies for, 193, 208, 272	Hope, nature of,	94
Green ointment,	—pleasures of,	<i>ib.</i>
—salve,	—effects of,	94—95
Grief, nature & effects of,	Hops, hopvine,	198
Ground pine,	Horsefly weed,	138
Gummyrrh,	Horse mint,	209
Haller's theory of life,	Horse radish,	270
Hanging,	Hot bitters,	323
Hatred, nature of,	House leek,	285
—effects of,	Hull's bilious physic,	330
Head-ache,	Hydragogue tincture,	347
—remedies for, 165, 195, 222, 225, 242	Hydrocle,	444
Heal-all,	Hydrophobia,	543
Healing salve,	—remedies for, 132, 207, 291	
Health, value of,	Hydrothorax,	441
—preservation of,	Hypochondria,	567
Heart-burn,	—remedies for, 130, 234, 242	
—remedies for, 174, 303, 304	Hyssop,	222
Heart leaves,	Hysterics,	655
Heart, office of,	—remedies for, 129, 130, 131, 133, 242, 335.	
—cavities of,	Hysteric drops,	335
—motion of,	Iceplant,	132
—seat of passion,	Ideas of external objects, how acquired,	29
remarks on as,	Immoderate sweating,	538
Heart snake root,	—remedy for, 165.	
Hemlock fir,	Imperforation of the hymen,	608
Hemlock tree,	Incontinence of urine,	434
Hemorrhoids,	Incubus or nightmar,	469
Herbs, time to gather,	Indian anodyne,	186
Hepatic pills,	—balm,	147
Hepatic diuretic powders,	—cup plant,	187
Hernia,	—fever root,	295
Hickup,	—lettuce,	259
—remedy for,	—hemp,	212
Highbelia,	—paint,	269
Hippocrates' theory of life,	—physic,	298
Hoarhound,	—sage,	257
Hoffmann's theory of life,	—sanicle,	188
Honey bloom,		

—turnip,	230	Joy, definition of,	90
Indigestion, see dyspepsy.		—modifications of,	ib.
Indigo broom,	138	—effects of,	91
Inflammation, general re-		Juniper tree,	199
marks on,	495	King's evil,	461
—articles useful for, are		Kidneys, position of,	25
antiseptics and diaphoret-		—appearance of,	ib.
ics generally.		—office of,	ib.
Inflammation of the brain,	497	Knot root,	194
—of the bladder,	499	Kussander,	195
—of the eyes,	500	Labor, symptoms of,	630
—of the intestines,	502	—natural,	631
—of the kidneys,	504	—preternatural,	636
—of the liver,	509	—management of wo-	
—of the lungs,	512	men during,	639
—of the peritoneum,	506	—medical treatment	
—of the spleen,	508	during,	643
—of the stomach,	505	—articles useful for,	129,
—of the throat,	514	162, 166, 185, 305.	
Inflamed or sore breasts,	619	—treatment after,	644
—remedies for,	365, & 204	Lacing, effects of,	80
Inflammatory fever,	412	Lacteals, use of,	23
Influenza,	516	Lady's slipper,	133
—remedies for,	386, 381, 359	Lark spur,	160
Infusion for sore eyes,	360	Lavender thrift,	226
Injections or clysters,	361	Lax,	452
—value of,	ib.	Laxative bitter tonic,	324
—recipes for,	362—64	—clyster,	364
—how administered,	402	Leaves, proper time to gather.	300
Insanity,	539	Lemon tree,	271
Integuments of the body,	17	Lichen or lung wort,	225
Intermittent fever,	407	Life or living power,	32
Intoxication,	542	—various opinions of,	33
Ipecacuanha,	296	—cause of organic action,	
Iron-weed,	265	but not of voluntary mo-	
Itch,	478	tion.	35
—remedies,	367, 220, 205,	—waste of,	26
and 142.		—means of supplying that	
Itch ointment,	367	waste,	42
Jaundice,	491	Life root,	209
—remedies,	254, 252, 246,	Lightning,	590
221, 158, 194, 213.		Liniments,	306
Jerusalem oak,	177	Liquorice root,	219
Joints, how lubricated,	16		

Liver use of,	22	—obstruction of,	611
Liver complaints, see inflammation of the liver.		—remedies for, 387, 221, 215 193, 181.	
Lobelia,	289	—retention of,	614
Lochial discharge,	648	—profuse flow of,	615
Locked jaw,	446	—remedies for, 148, 172, 168	
Locust plant,	278	—cessation of,	616
Love, nature of,	96	Mercurial disease,	554
—power of,	ib.	Mezereon,	238
—baffled, effects of,	97	Midwifery, general remarks on,	601
Lues venerea, see venereal disease.		Milk sickness,	560
Lungs, position of,	24	Milk weed,	193
—office of,	25	Milk wort,	227
Lynn tree,	174	Mint fermentation,	310
Madweed	131	Mirth, effects of,	93
Male fern,	179	Miscellaneous recipes,	377
Magendie's enumeration of the elements of the body,	15	Mistletoe,	239
Malignant sore throat,	518	Mocasin flower,	133
—remedies for,	139, 161, 167, 252.	Moor wort,	239
Mallow,	211	Motion of the body how pro- duced,	20
Mammæ or breasts,	26	Moses' theory of life,	34
—office and form of,	ib.	Mountain tea,	227
Man a compound being,	15	Mouth root,	255
—elements of his body,	ib.	Mother wort,	239
—Empedocle's enumera- tion of,		Mortification,	520
Mandrake,	252	Mumps,	523
May apple,	ib.	Muscles, use of,	20
Man root,	195	Mullen,	149
Maiden hair,	226	Mulberry tree,	287
Marsh trefoil,	272	Mustard,	267
May weed,	284	Narrow dock,	144
Materia medica,	125	Nausea and vomiting,	621
Materials, proximate,	16	—antimetetics, good for.	
Meadow pride,	259	Nephritic plant,	206
Measles,	480	Nettle,	ib.
Mediastinum,	18	Nettlerash,	482
—position of,	25	Neuralgia,	468
Medicines, when to gather and how to preserve,	300	Nentralizing drink,	302
Menstruation,	609	—mixture,	303
		—sirup,	304
		Nervines, class of,	312
		—tincture,	ib.

—powders,	ib.	Peach tree,	277
Nerve powders,	313	Pennyroyal,	181
—ointment,	366	Peppermint,	185
Nervous fever,	414	Pepper, see cayenne.	
Nervous colic drops,	335	Perennial roots, time to gather,	
Nerves, origin of,	20	299	
—two kinds of,	ib.	Persimmon,	171
—office of,	ib.	Perspiration, use of,	60
Never wet,	173	Peristaltic motion,	21
Night mar,	469	Phrensy, see madness.	
Oak, white, black, red,	171	Phthisic, see asthma.	
Oily grain,	284	Physiology,	30
Ointments, &c.	365	Pimento,	236
—for scalds and burns,	ib.	Pimpernel,	207
One berry,	185	Piles,	524
Onion,	222	Pipsissewa, prince's pine,	142
—sirup,	359	Plantain,	143
Operation of the botanic remedies.	120	Plasters and salves, various	
—of the mineral do.	121	recipes for,	371
Organs of the body,	18	Plenta, what,	24
—moving power of,	32	Pleurisy,	526
—waste of the substance of,	46	—remedies, for, 252, 232,	
—means of supplying that waste,	ib.	221, 187.	
Organs of sense,	20	Pleurisy root,	227, 232
Oxbalm,	194	Poisons,	563
Pain in the head,	624	—animal,	565
—in the os pubis,	625	—remedies for, 215, 197, 190	
—in the right side	627	—188, 183, 169, 143.	
Palpitation of the heart	470,	—mineral,	563
623.		—vegetable,	566
Palsy,	449	Poke, pigeon berry,	140
Pancreas, use of,	22	Pool root,	237
pappoose root	129	Poor Robin's plantain,	208
Partridge berry,	185	Pomegranate,	273
Parsley,	192	Peplar,	262
Parsley, leaved yellow wood,	263	Poultices,	368
Passions, definition of,	88	Preserving medicines,	298
—active forces of the soul,	89	Prickly ash,	274
—the fire and storm of the moral world,	ib.	Prickly elder,	ib.
		Prickly pear,	211
		Prickly yellow wood,	186
		Prince's feather,	158
		Pulse, indications from,	404
		Pregnancy,	619

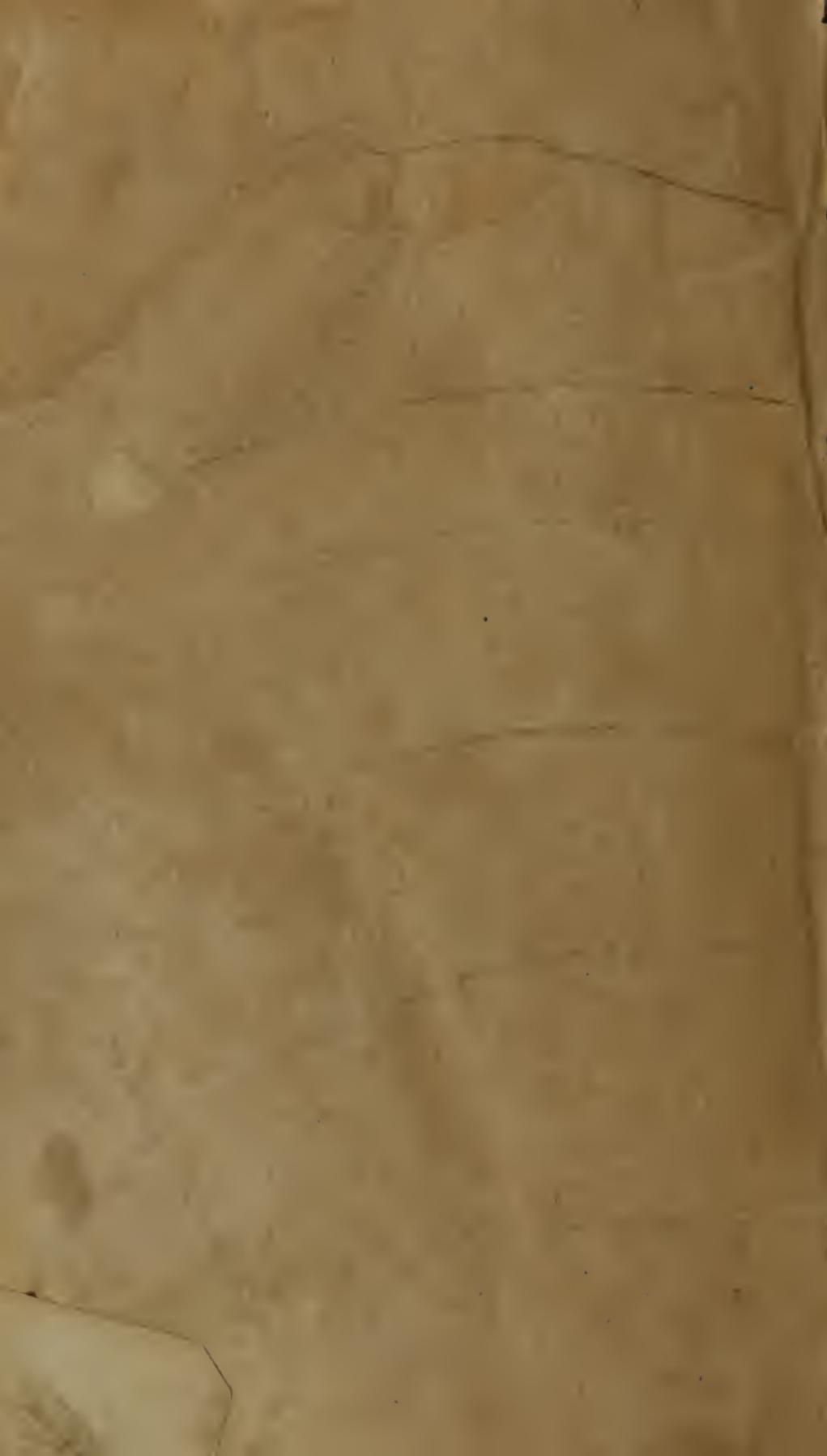
—signs of,	620	Saffron,	234
Pumpkin seed,	196	Sage,	240
Purgative syrup,	332	Salt rheum treated like ring-	
Quaking asp,	262	worm & tetter,	486
Queen of the meadow,	205	Salves & plasters,	371
Quince tree,	243	Sampson snake root,	261
Quiver leaf,	262	Sarsaparilla,	146
Raleigh Sir Walter, anec-		Sassafras,	145
dote of,	105	Scalds and burns,	456
Rattle snake root,	215	Scald head,	487
Rattle snake's master,	196	Scarlet fever, see fever.	
Rattle snake violet,	150	Scrofula,	464
Rattle weed,	181	Scrofulous ointment,	366
Red chick weed,	207	Scull cap,	131
Red gum,	660	Scurvy,	489
Red pepper,	233	—remedies for, 216, 213, 207	
Red pucooan,	221	Sea ash,	186
Red raspberry,	166	Selecting medicines,	298
Reed's antibilious pills,	329	Seeretion, what,	22
Relaxing ointment,	365	—different kinds of,	23
Remittent fever, see fever.		Seneca snake root,	215
Restorative tonic cordial,	325	Senna,	278
Retention of the urine,	626	Sensation, seat of,	19
and 658.		Sense, organs of,	20
—of the meconium,	657	Seven bark,	242
Rhubarb,	283	Shell bark hickory,	191
Rheumatism,	535	Sheep sorrel,	139
—remedies, 378, 327, 388,		Shingles,	485
268, 389, 265, 252.		Silk weed,	193
Rheumatic weed,	142	Sirup for dysentery,	319
—tincture,	378	Skerish,	215
—decoction,	ib.	Skevish,	160
—ointment,	388	Skunk cabbage,	131
—liquid,	389	Slippery Elm,	145
—bathing drops,	328	Sleep, necessity of,	39
Rich leaf, rich weed,	194	Small pox,	549
Ringworm,	486	Smart weed,	214
Rosin weed,	266	Snake head, balmony,	254
Rue,	180	Snake leaf,	150
Rupture,	591	Snake weed, snagrel,	251
Rush,	210	Sneeze or snuff weed,	225
Rush's theory of disease,	118	Snow drop,	150
St. Anthony's fire,	483	Soap wort,	190
St. Vitus' dance,	527	Solomon's Seal,	255

Somnambulism,	76	—powders,	340
Somniloquism,	ib.	Suffocation,	587
Sore & inflamed breasts,	649	Suspended animation,	585
Sore mouth and throat,	514	Sumach,	203
Sorrel salve,	373	—poultice,	370
Soul, not vitality,	31	—salve,	375
—powers of,	35	Sweating powders,	311
South Sea tea,	213	Swelled leg,	650
Spartan mothers' devotion,	81	Sweet basil,	182
—surpassed by the devotees of Fashion,	ib.	Sweat root,	188
Spasms, antispasmodics generally useful for,		Sweet elder,	204
Spearmint,	202	Sweet fennel,	247
Spice wood, spice bush,	184	Sweet fern,	159
Spikenard,	250	Sweet flag,	213
Spinal marrow, what,	19	Sweet gum,	163
Spitting blood,	428	Sweet liquorice,	219
Spitting or salivation,	622	Tag alder,	246
Spleen wort, 159, and	226	Tansy,	263
Spotted alder,	162	Teething,	661
Sprains,	431	Tetter,	486
—remedies, 327, 243, &	128	Thistle,	182
Squaw mint,	184	Thomson's school,	32
Squaw root,	129, & 181	—theory of life,	33
Squaw vine,	185	—theory of disease,	118
Squirrel ear,	189	—skill of, how tested,	120
Staff vine,	253	Thorough stem,	257
Star root,	245	—wort,	ib.
Starving, effects of,	39	Throat root,	161
Stick wort,	157	Thrush,	659
Stimulants, class of,	229	Tincture for gravel,	346
Stimulant injection,	362	—of spearmint,	309
—tonic clyster,	363	—of lady's slipper,	313
Stink weed,	177	—of lobelia seeds,	350
Stings of poisonous insects,	565	Toad lily,	150
Stone mint,	182	Tonics, class of,	245
Stomach, position of,	23	—various recipes for,	317-26
—office of,	ib.	Tonic eye water,	360
Strawberry,	215	Tobacco,	216
Strengthening plaster,	371	Tooth ache,	476
Striped bloodworth,	169	Tooth ache tree,	186
Styptics, class of,	376	Tourtell's theory of life,	33
Sadorifies, recipes for,	337	Touch-me-not,	194
		Transpiration cutaneous,	48
		—pulmonary,	47

Triennial roots, time to gather,	299	White wood,	261
Tulip tree,	261	White walnut,	279
Turtle head,	254	White swelling,	596
Twins,	638	—remedies, for,	339, 370, 387
Twin leaf,	198	White pond lily,	159
Typhus fever,	414	Whooping cough,	595
Ulcers,	463	Wild cucumber,	263
—remedies, 143, 144, 151, 155 167, 172, 250, 201, 233,		Wild chamomile,	248
Umbil,	133	Wild ginger,	231
Unicorn,	245	Wild hoarhound,	258
Ureters, use of,	25	Wild carrot,	207,
Urine, secretion of,	ib.	Wild lettuce,	142, 209
Vaccination,	552	Wild madder,	211
Valerian,	133	Wild potatoe,	195
Vapor bath,	396	Wild turn p,	230
Venereal disease,	553	Wild liquorice,	250
—remedies, 168, 174, 214, 238 204.		Wild cherry,	165
Vena cava, use of,	28	Wild cranberry,	168
Ventricles, what,	ib.	Wild indigo,	138
Vegetable poisons,	536	Willow,	275
Vegetable caustic,	354	Wind root,	227
Vermifuges, class of,	306	Winter clover,	183
Vermifuge poultice,	390	Wine bitters,	323
—oil,	308	Winter berry,	141
Vertigo,	471	Winter bloom,	162
Vervain, or vervine,	293	Winter green,	142
Vinegar,	153	Witch hazel,	163
Vine maple,	262	Witch weed,	285
Virginia snake root,	251	Worms,	598
Volatile liniment.	368	—remedies,	390, 307, 270, 251, 184, 180, 179, 173, 177
—epithelm,	377	Worm wood,	180
Wake robin,	239	Worm powders,	306
Wandering milk weed,	249	—drops,	207
Want of sleep,	627	Worn out matter how re- moved from the body.	47
Waste of the living power,	36	Wounds,	457
Waste of the substance of the organs,	46	Yarrow,	172
Water cresses,	216	Yaupon,	212
Water plantain,	158	Yeast,	153
Wax myrtle,	164	—poultice,	371
Whites, or flour albus,	652	Yellow gentian,	260
White elm,	145	Yellow lady's slipper,	122
White bryony,	288	Yellow parilla,	262
White hoarhound,	220		
White snake root,	237		

Yellow poplar,	261	Yellow snowdrop,	150
Yellow root,	260	Yellow wood,	263
Yellow fever,	419	Yellow gum,	660
Yellow salve.	375		

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